This material was prepared by Christian teachers, writing under the direction of Arnold H. DeGraaff, in a curriculum workshop conducted during the summer of 1970 by the Institute for Christian Studies in co-operation with the Ontario Alliance of Christian Schools.

TEACHER'S MANUAL

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A. GOD'S PLAN

1. Basic Concept:

God created everything according to his Plan.

2. Classroom Procedure:

a. Ask: Where does everything come from?

Point to concrete things in the classroom or outside. We learn from the Bible that God made everything the way He thought best. He had a perfect plan for everything. All things are made according to that plan. God said how it was to be and there it was . . . . that way. Everything had to obey God's voice. All the things made by God are called His creation, for He created them.

b. Arrange the class in small work groups (four pupils). Have the children draw a picture of God's plan in their workbooks, or provide them with a worksheet (see sample page). The worksheets can be collected for a project book.

c. The following song could be taught in relation with this lesson:

"Creation's Song" in Let the Cosmos Ring, Songs for a Century of Peace and Tumult, Toronto: Teen and Twenty, 1968.
Creation

Plan

God Speaks
B. NIGHT AND DAY: A PART OF GOD'S PLAN

1. Basic Concept:

Night and day are a part of God's Plan for creation. God's Plan for light and darkness is Law.

2. Classroom Procedure:

a. Place pictures of darkness and light on the bulletin board in random order. Have the children organize the pictures in two categories. Ask: What do the pictures show? (Light and Darkness, Day and Night). Which pictures belong together? Let each pupil put one picture under each heading.

b. Ask: What makes the day, day? (Sunlight) What makes the night, night? (Darkness) Will there be a day-time tomorrow? Will it be dark this evening? How do you know? (God made it that way, that is how we know.) Will there always be a day and then a night? How do you know?

c. Tell: Day and night are a part of God's Plan for the world. Light and darkness have to obey God's voice. Day and night will never change, for God's Plan is Law. (He promised not to change his Law. Refer to the story of Noah.)

d. Ask and discuss: What would happen if it stayed dark tomorrow morning? What would happen if it stayed day tonight? What do we do during the day? What do we do during the night? Day and night are a part of God's order for the world. That order is for our good!

e. Provide each pupil with seven strips of black paper. Have them paste the strips on a white sheet to make seven sets of day and night. Let them draw a moon on each dark strip and a sun on each white strip. Let them name each pair of day and night (Monday, Tuesday, etc.).
<table>
<thead>
<tr>
<th>Night and Day</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Sun" /></td>
</tr>
<tr>
<td><img src="image2" alt="Moon" /></td>
</tr>
<tr>
<td><img src="image3" alt="Sun" /></td>
</tr>
<tr>
<td><img src="image4" alt="Moon" /></td>
</tr>
</tbody>
</table>
C. DISCOVERING MORE OF GOD’S PLAN: FOUR REALMS

1. Basic Concept:
   God created four realms, which belong together.

2. Classroom Procedure:
   a. Do you think we can see more of God’s Plan for the earth? Let’s find out.

   For this grade a collection of pictures could serve as a teacher’s aid to get the pupils to understand the four realms: things (physical things), plants (organic things), animals (sensory creatures), and man (religious creatures). Group the pictures that represent one realm together. Do not mix them up during the introduction. Name the things shown in the pictures and have the student try to think of a name for all of these. Do the same for all the groups. Let the children mention other things for each group.

   b. Ask: Does everything in the world belong to one of these four groups? Let the children think about this question for a moment. Introduce the word "realm". The four realms are part of God’s Plan. Everything belongs to one of the realms.

   c. Let the children cut out pictures from magazines and let each pupil add one picture to each realm on the bulletin board.

   d. Provide the children with a worksheet of God’s Plan, showing the four realms. Have the students cut out and paste a picture under the right heading.

   e. For later review pictures could be arranged at random on the bulletin board. Let the children choose a picture and put it under the right heading. Let them explain why it belongs under that heading. This procedure may generate a lot of discussion. (Where does a man on a tractor belong, or a crow in a tree? etc.)
D. EACH REALM IS DIFFERENT

1. Basic Concept:

There is a basic difference between each realm. Man is a religious creature.

2. Classroom Procedure:

a. Things are different from plants. Ask: How are plants different from things? What can plants do? What can things do? Things can hit together and have size, shape, color. Plants grow. Make use of the bulletin board display.

b. Things and plants are different from animals. What can animals do that plants cannot do? What do animals have plants do not have? They can move and have sense organs.

c. Man is different from all other creatures. What can man do? Do animals do some of these things? Is there a difference (when both men and animals do the same thing)? Man walks, grows, feels, thinks, talks, has fun, makes things, works, is fair (or unfair), loves (or hates), is kind (or unkind), and worships. The one thing that makes man different is that he hears God's voice and answers God. (Refer to the creation story: God spoke to man and gave him a task.) Man must take care of all other things: animals, plants, things.
E. THE ONE TASK

1. Basic Concept:

God gives one task to all people. The one task has many parts.

2. Classroom Procedure:

a. Ask: What do most people do all day? They work. Have them name some jobs. Why do people work? To make money. To eat. What other reason can you think of? People like to work. They enjoy making and doing things. When did all this work start? In the beginning after God created Adam and Eve He gave them a job to do.

b. Tell: God made the earth for man to live on. He told man to take care of the earth and finish everything. Adam had to look after the garden and name the animals. That was his job.

c. What are some of the jobs people have today? How many jobs are there? How are they the same? They are all a part of the big job God gave to all people to take care of the earth and to finish it. All jobs are a small part of this one great job. Adam started his task. We must continue it, for it is still not finished. All people must work on it. Some day the task will be done and then we will rest like God rested from his work when He finished creating the world.

d. Make a display together on the bulletin board of people doing different kinds of work.
F. EVERYTHING SPOILED - STARTING OVER

1. **Basic Concept:**

   Man spoils the creation, God gives man a new start.

2. **Classroom Procedure:**

   a. Ask: Did Adam do a good job taking care of the garden? No. What went wrong? Man did not want to listen to God anymore how to do his work. He listened to Satan and then everything went wrong. How did it show that things had gone wrong? Cain killed Abel. People did not work together anymore at their one task. How can you see that things go wrong today? Do all people do a good job? Does everything work out right? Can you think of something that has not been taken care of very well? Let each child have a turn and make a list of the things mentioned. Discuss particularly hunger, pollution and war. Show filmstrips, slides, newspaper or magazine pictures to illustrate hunger, pollution, war, etc. Perhaps it is possible to see examples of neglect or pollution in the neighbourhood.

   b. Tell: When man is disobedient to God, he cannot take care of creation properly anymore. Then everything goes wrong. Man forgets his task. He becomes careless and only wants to do and have things for himself. When this happens people become unhappy. When things go very bad, even man's life is in danger (hunger, pollution, war). All this happens because people don't want to listen to God. Disobedience to God is called sin, and when people sin they deserve to die.

   c. Tell: Even though man spoiled everything and made things go wrong, God did not leave him to die. He loved his creation too much. and
He loved man too much. So right after things went wrong in paradise, God promised to make things better again. He promised to send Jesus. Jesus came and He listened to God. He was obedient. He made up for man's disobedience. He began to set everything straight in the world. He is making all things new and He wants us to be his helpers. Jesus knows that we spoil the earth every time; he knows we fight and bicker; he knows we let people go hungry at times. But He still says: Be my helper. Listen to me and do what I tell you, then things will go right and then you and everybody will be happy. By listening to Jesus we can do a good job again. By obeying Jesus we can take good care of things again. If we listen to Him we can be happy again in doing our small jobs as a part of the one big task. We can be happy again taking care of the earth until the Lord comes back to finish everything.
UNIT II

THE EARTH: MAN'S HOME
Unit II: The Earth: Man's Home

Introduction:
The pupils have already learned that God has created everything according to his plan. Now we begin to help the pupils discover and understand that God's Plan is made up of many parts.

General Objectives:
To teach the pupils God's Plan for the physical environment.
To help pupils discover that man's activity takes place in physical surroundings.
To show that God besides ordering just the physical things has also ordered change and movement (earth's forces temperature).
To show how our environment can be recorded in symbols (maps).
A. LAND, AIR AND WATER

1. Basic Concept:

Air, land and water are different and have their own special place.

2. Classroom Procedure:

a. Have available: a bucket of earth, a bucket of water, an empty jar with a lid on it.

Ask: What are these? Where do you find them? Label each with either Land Water Air. Pointing to each sample ask questions such as: Do you find this in the sky? Do you find this in the land? Do you find this in the water? Discuss: The children will probably say that all of them are found in the land, air, and water, in small amounts. When the air, land or water are all together they have a special place. Ask: Where do you find the air altogether (in one place)? Where do you find the land altogether (in one place)? Where do you find water altogether (in one place)? Discuss: Talk with the children about the air being all above the earth and water. The water in oceans, lakes, rivers and ponds. The land all gathered together in plains, hills, mountains all around us, etc. The emphasis should be that each has its own place.

b. Picture Study:

Use pictures of filmstrips to locate the position of air, land and water. Have the children point to air, land (hills, plains, etc.) and water (rivers, lakes, ponds, etc.). Discover that air is above the land and water, etc.

c. Prepare a worksheet on which is drawn a land, air and water scene (see illustration). Have the children colour the land brown,
the water blue and have the air remain colourless.

d. Cut and Paste:
Have cut-out labels prepared, marked land, water and air. Allow
the children to glue the labels in the proper places on the
prepared worksheet (after it has been coloured). The same could
be done with magazine pictures.

e. Allow the children to draw their own land, water and air
pictures.

f. Field trips:
Point out land, air and water as the children see them. Try to
show that air never becomes water, water never becomes land, etc.

g. Films or filmstrips:
Point out again how air, land, and water have their own places.
B. **LAND IS NOT ALL THE SAME**

1. **Basic Concept:**

   Land differs in appearance, texture. Rocks, sand and soil all compose land, but only soil will grow things.

2. **Classroom Procedure:**

   a. Bring into the classroom: a tray of gravel; a tray of loose sand; a tray of soil; a large solid rock.

   Ask: What would you call all four of these - land, water, or air? (Land) Do you think all these kinds of land are the same? Pointing to each sample ask: How does the gravel differ from the large rock? Is it bigger or smaller, does it look different, etc.

   Continue in the same manner with sand and soil. Ask: Which type of land would grow things? Establish that rocks, gravel, sand and soil are different types of land but only soil will grow things.

   b. Picture and sample study. Show the children a picture of a desert, mountain, beach, rocky field, gravel pit and a productive field (wheat, grapes, flowers, etc.) Ask: What do you see on this picture? Which picture would go with each land (tray) sample? A mountain picture would go with the large rock sample, the desert picture with the sand sample, etc. When the children can identify the land types in each picture, mix up the pictures and have them placed with the proper tray sample.

   c. Discuss how rocks can be broken down into smaller parts and become gravel and sand. Have samples of broken-down rock available or have the children hammer some rocks down. Have the children discover that gravel and sand were once part of solid rock. Discuss how wind and water break down rock.

   d. Ask the children: Which do you think man uses the most? Gravel, sand, rocks or soil? Have the children find pictures of people using...
C. ROCKS

1. Basic Concept:

Rocks differ in appearance (size, shape, colour) and in feel (hard or soft).

2. Classroom Procedure:

a. Have the children bring rock samples to school or plan a field trip to look at rocks and collect specimens. Discover how rocks vary in size, shape, colour, and feel. Establish that some rocks are large, some small, some crumbly, some rough, some very smooth. Discover that within one stone or pebble there may be many colours.

b. Rock study. Take a smooth and a rough rock. Have a child close his eyes and feel them. What does he feel? The child should discover that rocks may be smooth (worn by water) or rough.

c. Try to get a sample of soft, crumbly shale to compare with a piece of hard rock. Scratch each with a fingernail. Establish that it is much easier to scratch shale because it is softer.

d. Make a chart.

```
<table>
<thead>
<tr>
<th>Rocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rocks are different colours</td>
</tr>
<tr>
<td>Rocks may be smooth, or rough</td>
</tr>
<tr>
<td>Rocks may be soft, or hard</td>
</tr>
</tbody>
</table>
```

e. Have the children make a rock display. Label various rocks as to size, texture, colour, etc.
D. WATER IN ITS NATURAL PLACE

1. Basic Concept:

Water is found in various places.

2. Classroom Procedure:

a. Discuss with the children all the places where they have seen water.

b. Bring in a series of pictures which show water in lakes, streams, ponds, rivers and oceans. (If possible one for each child.) Circulate the pictures around the room. Ask several children to describe what they see in their picture. Ask: What can you find the same in each picture? Establish that there is water in some form in each picture. Print the word water on the board. How many of you have a picture where the water is in a lake? Print lake on the board and have all the lake pictures put beneath it. Continue in the same manner with rivers, ocean, stream, pond, falls. In a simple way explain how each of these are different, e.g. a lake has land all around it, a pond is very small, etc.

c. Make a bulletin board display using point b.
E. WHERE IS THE AIR?

1. Basic Concept:

Air is all around us. Air can differ in temperature, but always remains air.

2. Classroom Procedure:

a. Go back to the first picture (lesson A). Have the children point out where there is air in the picture (above the earth).

b. Allow the children to discover that air is all around them. For example, have the children hold their nose and close their mouth. Ask: Why can't you keep this up very long? (Because you need air to live.) How do you get air? Do you have to go to a box, to an air-tap, to the store to get it? Where do you get it? (It is all around us.) Is it on the playground? Is it in your home? Is there still air when you sleep? Establish that air is someplace - it takes up space.

c. Have the children discover that air can be different temperatures. Introduce the thermometer. Have a thermometer put in the refrigerator earlier in the day. Take the children to the refrigerator and let them hold their hand in the refrigerator. Ask: How did the air in the refrigerator feel different from the air in the classroom? (It was colder.) Was it air? (Yes) Compare the classroom thermometer with the one in the refrigerator. Discuss the difference between an air conditioned store and the air outside on a warm day. Do you breathe the cold air in the store? Do you breathe the warm air outside? Can air be hot or cold, warm or cool and still be air? When is air usually colder? (Winter) When is air usually warmer? (Summer)
(E - continued)

d. Suggested activities.

(1) Mural, chart - Purpose to establish that the air is above the land and water, and comes down to the land and water.

Have children put in cut-outs of things, plans, animals, that have air around them.

(2) An experience chart.

Air

Air is all around

Air can be hot

Air can be cold

Make pictures to complement this chart.
1. **Basic Concept:**

   The seasons follow one another and their order cannot be changed because God planned it that way. (Genesis 8:22)

2. **Classroom Procedure:**

   a. Show a film or filmstrip on the seasons. Establish that there are Four Seasons, spring, summer, fall and winter, and that they come in specific order.

   b. Have a variety of pictures on the seasons available. Hold up each picture and ask the children to tell what the season is. Arrange all the pictures in groups according to seasons. Mix up the pictures and have the children rearrange them in their proper order. Pin them up on the bulletin board.

   c. Discuss: The seasons were put in this order by God. Can the order ever be switched? Do you think there could be summer all year? Do you think there could be winter all year? Ask them why?

   d. Suggested activity: Arrange the class in groups. Have each group paint one season on a large sheet. Put a label on each sheet - winter, spring, summer, fall. Put the pictures up for display. The display could be entitled "God Put Them in Order."
G. ALL OF CREATION CHANGES WITH THE SEASONS

1. Basic Concept:

   Everything in creation changes when the seasons change.

2. Classroom Procedure:

   a. Discuss:

      (1) What season is it now? Is the air warm or cold? What kind of clothes are we wearing for this season? What do the water, the trees and plants look like? What are the birds and animals doing? What would a farmer be doing?

      (2) What will the next season be like? What will happen to the air, the water, the trees? Will they change? What will the birds and animals be doing? What will we be doing? (wearing different clothes, playing more indoors or out, etc.)

      (3) What happens to the air in winter, the water in the lakes, the trees, birds, etc. etc.? Establish that everything changes when the season changes - In winter the air becomes colder, the water becomes ice, the soil becomes hard so we cannot plant or grow food or flowers. The plants die because they have lost their leaves. Animals need to find warm homes. Their fur becomes very thick. People need to find warmer clothes, heat their homes, etc.

   b. Write these four headings on the board:

<table>
<thead>
<tr>
<th>Things change</th>
<th>Plants change</th>
<th>Animals change</th>
<th>People do different things</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Have the children draw a picture appropriate to one of these titles and put it up on the board. Some may want to do a series of pictures on changes in all of the seasons.

c. The teacher could prepare a worksheet of four pictures illustrating the above. Have each child put his up in the appropriate column.
H. THE EARTH IS ROUND

1. Basic Concept:

God created the earth round.

2. Classroom Procedure:

a. Have available a large globe (preferably a beginner's globe. Rand McNally Beginner's Globe 4544E or MM4544E.) Hold up the globe. Ask: Is this a beach ball? Is it a soccer ball? Is it round like a ball? What do you think it is? What do you think the green is? What do you think the blue is? Where is the air? It is a very, very small picture of the earth. Do you live on the earth? Does it look round? Display some pictures. Does the earth here look flat? Show some pictures from an airplane. The further we go up, away from the earth, the easier it is to see that the earth is round. Show some pictures of the earth taken from space.

b. Have available a large beach ball. Place on it miniature car, horse, toy soldier. Take a close-up, polaroid picture of these on the beach ball. Show the children how it seems to look flat on just that part of the picture. Discuss: The earth looks flat. Does the scene in the picture look flat? Some children will say yes, others no. Tell them that each picture of the earth is part of that round earth. Show the pictures of the earth taken by the astronauts. We have only taken a picture of a small part of the surface of the beach ball. Can you see the whole beach ball in the picture? (No) You see only a part. We live on a part of the earth.

Prepare a worksheet which is divided into four parts.
Part one - a close-up of the beach ball with the small toys.
Part two - a picture of the ball from far away.
Part three - a picture of the earth as we see it. (flat)
Part four - a picture of the earth from space.
Ask the children to cut the sheet into the four parts. Ask the children to hold up the correct picture as you ask the following questions: 1. Hold up the picture of the beach ball from very close. 2. Hold up the picture of the ball from far away.
3. Hold up the picture of the earth the way we see it. 4. Hold up the picture of the earth from far away (space). Repeat, varying the order of the questions. Ask: What have we learned about the earth?

It is round.
I. THE EARTH PULLS (GRAVITY)

1. Basic Concept.

   Inside the earth there is a pull. Everything stays down on the earth because of this pull from the center. God made the earth with this pull in it.

2. Classroom Procedure:

   a. Throw a ball in the air. Ask two children to pick up a desk and then let go. Ask one pupil to stand on your desk and walk straight off. Hold up a cup of water and turn it over. Ask the children: What happens? (They all fall. They all come down.) Why? Discuss: Inside the earth there is a pull. It pulls everything down and keeps it on the earth.

   b. Classroom activity. Bring in a globe. Tell the children we will pretend this is the earth. With plasticine put on tiny cut-outs of car, tree, people, animal, boat, etc. Find pictures of the same (tree, car, people, animal, boat, etc.) Ask the children: Are these on the earth? (Holding pictures up.) What makes them stay down? Repeat this with several pictures. Compare each to the globe and cut-outs.

   c. Discuss: Everything stays down because the earth pulls it. These things do not need plasticine. God made the earth with this pull in it. Ask: What keeps people on the earth? What keeps the animals on the earth? What keeps the plants on the earth? What keeps the water on the earth? What keeps the land together on the earth? What keeps the air around the earth?
(I - continued)

d. Divide a large piece of paper in half. On one side have the children draw how everything looks because the earth pulls. On the other side have them draw a picture of how they think everything would look without the earth's pull.
J. NIGHT AND DAY: THE EARTH MOVES, THE SUN STANDS STILL

1. Basic Concept:

Day and Night is caused by the earth moving around the sun.

2. Classroom Procedure:

a. When do we see the sun? When do we not see the sun? When you get up in the morning, where do you see the sun? When you go to bed at night, where do you see the sun? Where do we see the sun at lunch time? We see the sun in many different places in the sky. During the night we do not see the sun. The earth has turned away from the sun. In the morning the earth is turning towards the sun. The sun stays in the same place. The sun does not move. When you are sleeping other people in other places see the sun. (Establish that the earth turns once for each night and day.) Let us see how this happens.

b. Demonstrating the cause for day and night.

Establish first that light (and heat?) comes from the sun. Then, demonstrate the cause of day and night with a globe and a flashlight or projector. (Point the flashlight directly at the equator.) Show when one side of the globe is lighted (day), the other side is dark. Turn the globe slowly to show how daylight goes around the world. A piece of white paper can also be stuck to the globe marking where the children live. As the globe is turned slowly the children will see when it is light where they live it is dark on the other side of the world and vice-versa. Establish that this is caused by the earth's turning.

c. Class activity.

Get a group of six children. Have them stand in a circle, facing
out. Have them link arms. Put this group of children in one end of the classroom. At the other end shine the light of the film projector towards the group of children. Tell the children that they are going to be the earth and that the light will be the sun. Turn on the projector. "The sun is shining."
Tell the children to turn in a circle. "The earth is turning."
(It might be wise to repeat this several times.) Stop the earth turning.
Ask: Who sees the most light? (sunshine) Who sees the least light? (sunshine) Who sees the day? Who sees the night? Who is probably sleeping? Who is eating lunch? Who is probably getting up? Who is probably going to bed? etc.
Have the earth turn again. Stop. Repeat the same series of questions. At the end of the lesson ask: Does the sun ever stop shining? Does the earth ever stop turning? Why? (There is always day and night. God made it that way.)

d. Experience chart.

<table>
<thead>
<tr>
<th>The sun does not move</th>
</tr>
</thead>
<tbody>
<tr>
<td>The earth turns</td>
</tr>
</tbody>
</table>

e. Make shadow men. Take a large piece of bristolboard for each child (a group of children). Take them outside. From the same spot during several parts of the day have them draw their shadows. These could be put up in the hall with this title, The Earth Moves. Notice how the shadows get longer as the day advances.
K. MAP SKILLS: THE CLASSROOM

1. Basic Concept:

A map is a special kind of drawing which represents something real.

2. Classroom Procedure:

a. Take a photograph of part of the classroom. Make a two dimensional drawing looking right down into the room. Put this on the opaque projector. Have the children identify the different objects in the room. Discuss: A map is a drawing. It is a special kind of drawing. It is not the same as a picture. Maps are drawn as if you were looking down from up high. (See illustration.)

A map can be very large or a map can be very small. We will make a map of our room. Help the children by teaching them the symbols for a desk, chair, table, window, blackboard, door. Cut-outs for these objects could be made and the children could lay the cut-outs on their paper and trace around them.

e.g. chair \[\text{table} \][\text{door} \[\text{window} \]

\[\text{blackboard} \]

b. Each child could work on his own or they could work in small groups and make a map together. Give each child (group) a large piece of bristolboard and have them make a map of their class. Have the opaque with the picture and drawing ready for their reference. When they are finished you could choose one map and place their name cards on the desks or other parts of the room in a mixed up order. Tell the children to find their new place.
c. Using this floor plan, the children will enjoy playing a
treasure-hunt game. Two or three children are chosen as
"treasure hunters," and leave the room while the class hides
the treasures. One child marks the location of the treasure
on the floor plan with an X. Then the treasure hunters are
called in to find the treasure with the help of the plan.
L. MAP SKILLS: NEIGHBOURHOOD

1. Basic Concept:
   We can represent the neighbourhood by means of a map.

2. Classroom Procedure:
   a. Take the class for a walk around the neighbourhood in the area of the school. Discuss the things they see along the way, e.g. apartment building, bridge, house, gate, river, or creek, store, etc.

   b. Make a two dimensional scale model of everything they saw.
      Use symbols - blocks for buildings, papers for roads, cardboard for bridges, etc.

   c. Draw a picture map using the above model.

   d. Draw a map of the above using symbols. Symbols could be drawn on the board for children's reference.
UNIT III

PHYSICAL THINGS
A. **THE REALM OF PHYSICAL THINGS**

1. **Basic Concept:**

   There is a Plan (of God) for the realm of physical things.

2. **Classroom Procedure:**

   a. Display the chart of the four realms which the pupils made when discussing God's Plan for creation. Review the differences between the realms. Ask: What are the four realms? What are the differences between the realms? What can the things or creatures in each realm do? How is man different?

   b. To learn more about God's Plan for the realm of physical things, make a new chart together of physical things. Include both natural and man-made things. Let each child give an example or select another picture.
B. **FOUR SHAPES**

1. **Basic Concept:**

   Physical things have various shapes (two dimensional). There are four basic shapes: circles, squares, rectangles, and triangles.

2. **Classroom Procedure:**

   a. Prepare the following before the lesson: the four basic shapes cut out of red, blue, yellow (only primary colours) construction paper. Cut out a variety of sizes of each shape. Ask the students to group the paper cuttings. Discuss: Why did you group them in this way? What are the differences between the groups?

   b. Together find the correct name for each shape (square, circle, rectangle, and triangle). Ask: Name some things that are shaped like a circle, (clock, coins) Name some things that are shaped like squares and rectangles. (desk, books, door, floor, ceiling, window) Name some things that are shaped like a triangle. (rhythm instrument, road sign)

   c. Using the basic shapes, have the children make a picture or a design. (see example 1)

   d. Hand out a worksheet, divided into four parts with the following headings: circles (○), triangle (△), rectangle ([]) and square (□). Have the children draw concrete things that have these shapes in the appropriate space, or have the children cut out pictures and paste them under the appropriate heading.

   e. Art activity: picture made from basic shapes (see example 3).
THINGS HAVE DIFFERENT SHAPES

circle

triangle

rectangle

square
C. ANOTHER SIDE

1. Basic Concept:

The various shapes of physical things can have another side to them (3-dimensional), then they are called: cube, ball, cylinder, and prism.

2. Classroom Procedure:

a. Introduce 3-dimensional objects by showing:

1. a circle (construction paper), a ball, and a cylinder
2. a square (construction paper), and a block
3. a rectangle (construction paper) and a brick
4. a triangle (construction paper) and a prism

Ask: How are these things alike (in each pair). How are they different? Introduce the words: ball, cube, cylinder, prism.

Show that each of these things are built up of the basic shapes.

Trace around each of them to show the basic shapes. Have the children name some physical things in the shape of a ball (globe, marble); in the shape of a cube (blocks, sugar cube); in the shape of a cylinder (tin can, sausage, fluorescent light bulb); in the shape of a prism (pyramid).

b. Have the children make 3-dimensional shapes from clay.
D. **DIFFERENT SIZES**

1. **Basic Concept:**

   Physical things come in various sizes: large, medium and small (relative size).

2. **Classroom Procedure:**

   a. Have a desk full of objects of various sizes. Let the children come up to see these different objects. Ask: Which things on the desk would you call small? Which are large? Are there some things that seem to be in between? Divide the objects into categories of large, medium and small. (Introduce and explain these words if the children aren't familiar with them.)

   b. Discuss: Things seem larger and smaller depending on what they are compared to. Is a pencil larger than a toothpick? Is it larger than a book? Is the book larger than the globe? etc. Make a chart with the children. Place objects in the room under the headings: large, medium and small.
E. **DIFFERENT COLOURS**

1. **Basic Concept:**

Physical things have different colours. The primary colours are red, blue and yellow. Other colours can be made by combining the primary colours in different ways.

2. **Classroom Procedure:**

a. Have the following ready before starting the lesson: Cut-outs of the four basic shapes (circle, square, rectangle, and triangle). Use the three primary colours. Cut the shapes in various sizes (large, medium and small). Have the children group the cut-outs according to shape, then according to size. Next ask the children if they can think of another way in which to group these cut-outs (according to colour). What colours do you see? Have the pupils realize that they have grouped the shapes according to three basic colours (red, blue, yellow).

b. Give each pupil a sheet which has been ruled off into thirds with the following instructions: Paint the first block red. Paint the second one yellow. Paint the third one blue. Let the pupils experiment by painting over each colour with the other two. Ask: What new colours did you find? (orange, green, purple) Discuss: By combining the three primary colours new colours can be made (a colour wheel would be helpful).

c. Have children cut out balloons and paste them on a worksheet (see example 1).

d. Have the children make a rainbow by using the basic colours and the new colours. Start with red at the top and have pupils finish up the rest of the rainbow by moving from one primary colour to the next. (red-orange-yellow-green-blue-purple)
F. **HOW DOES IT FEEL?**

1. **Basic Concept:**

   Physical things have a certain feel or texture: hard, soft, smooth, rough, wet, dry.

2. **Classroom Procedure:**

   a. Place a wide variety of objects on a desk (marbles, cotton, rocks, ball, paper, sandpaper, water, sand, cloth, etc.). Have the children feel these objects. Discuss the differences they feel (hard, soft, rough, smooth, wet, dry). Hold a marble in one hand and cotton in the other. Ask: What difference do you notice? Do the same with paper and sandpaper, water and sand, etc. Help them to describe what they feel with the words hard, soft, smooth, rough, wet and dry. Discuss: We can identify things by their feel.

   b. Have each child make a chart with pictures, placing various things under the following headings: hard: soft:

   Some objects can fit under more than one category. We can identify them by more than one property. Discuss this with the children.

   c. Have the children bring things with different textures from home, such as: tin foil, cardboard, crepe paper, different materials (wool, cotton, fur). Using all these things, have the children make a collage.
G. SIZE, SHAPE, COLOUR, FEEL

1. Basic Concept:

Physical things can be grouped in various ways: size, shape, colour, feel.

2. Classroom Procedure:

a. Have the following ready: Many, many objects of various colours, shapes, sizes and feels. Divide the class into small groups (four to five to a group). Provide group with a tray or desk of objects. Instructions: Group these objects according to size. Group them according to shape; colour; feel. See if each group is following instructions. Discuss: Why did you put this object here? Why are these two things grouped together? etc.
1. **Basic Concept:**

   All physical things are matter. Matter can be found in any one of three states: solids, liquids and gasses.

2. **Classroom Procedure:**
   
   a. Prepare a chart with pictures of physical things grouped according to their state: solids, liquids or gasses. (No headings yet) Discuss the groupings: Why are the rock and soil placed together? Why are water and milk placed together? Why are air and steam placed together? What are the differences between the three groups? Find a name for each group. Explain briefly the meaning of solid, liquid, and gas.

<table>
<thead>
<tr>
<th>SOLIDS</th>
<th>LIQUIDS</th>
<th>GASSES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

   b. Take all the pictures from the chart. Mix them up, and have the children pin them each under the correct heading, explaining why they put them in that category. Provide pupils with a worksheet with three headings and have them paste pictures under the right heading (see example).
I. ENERGY

1. Basic Concept:

All physical things have energy. When two or more physical things hit together, we can see energy at work.

2. Classroom Procedure:

a. For this lesson it is especially important that the students become excited and interested. Discuss: All physical things we talked about have something very special in them. It is a very important part of God's plan for physical things. We can't see this at all, but we can discover many things about it. When two physical things hit together, we can see something happening.

b. Through small demonstrations, give the children a feeling of WOW!!

Suggestions:

1. Hold a match in one hand and the match box in the other - nothing happens. Strike the match along the box - WOW - fire!
   (Always stress that by themselves the objects do nothing. There has to be a hitting-together.)

2. Hold lit match in one hand, and paper in the other - nothing happens. Bring paper and match together - WOW - paper burns, turns to ashes!

3. Have piece of glass on your desk or floor, and a stone in one hand - nothing happens. Drop stone - WOW - sound and shattered glass!

4. Prick a balloon.

5. Have the children mention other examples of energy (firecrackers, etc.)
J. KINDS OF ENERGY

1. Basic Concept:

There are different kinds of energy: heat, magnetism, electricity, sound, and light.

2. Classroom Procedure:

a. Review the previous lesson: All things have energy in them. Two things must hit together before we can observe this energy. Demonstrate again that we can see this energy in many different ways. Introduce the new words as you go along. Show heat energy by rubbing two objects together to produce heat. Discuss fire, and the sun. Show magnetism by having a magnet with many objects that are drawn to it. Use objects children are familiar with. Show electricity by plugging in the radio, phonograph etc. (something in the room). Show that you have to have a closed circuit. (This can be shown with a battery, wires and a light bulb.) Talk about other appliances (toaster, television, fan, vacuum cleaner) and lightning. Show sound by clapping hands, slamming the door, hitting two books together. Discuss jets and thunder. Show light by putting a flash light and batteries together.

b. Prepare a chart divided into five headings - heat, electricity, magnetism, sound, and light. Have pictures showing the various kinds of energy. Have the pupils place the pictures under the correct heading.
A. REALM OF PLANTS

1. Basic Concept:

There is a Plan (of God) for the realm of plants.

2. Classroom Procedure:

   a. Reintroduce the picture-chart used in relation with Unit I, God's Plan, dealing with the four realms. Have a rock and a plant in front of class. Ask: Do you remember why this rock belongs under physical things? Can we put a plant under physical things? Why not? Do plants ever become physical things? Plants grow, change and multiply.

   b. Make a new picture-chart together of the large variety of flowering plants, grasses, mosses, ferns, trees, etc. Discuss: which pictures belong together (flowering plants, etc.). Review each major group. Ask: Do they all grow, change, multiply? All plants obey God's Plan for plant life. In the many groups of plants we see something of God's plan for the plant world.

   Whenever possible, instead of pictures use filmstrips, slides or movies.
B. HOW PLANTS ARE PUT TOGETHER

1. Basic Concept:

Most plants have four parts: roots, stem, leaves, flower.

2. Classroom Procedure:

a. Examine the basic parts together of different plants in the classroom. Show and discuss different types of roots, stems, leaves, and flowers. Let the pupils identify the parts of available plants. Perhaps a number of plants ("weeds") could be dug up around the school.

b. Provide the children with two worksheets (1,2), and let them compare, identify and colour the pictures. Let them add leaves to the branches of the tree and another stem and flower to the plant.
Parts of a Plant

- Roots
- Stem
- Leaves
- Flower
A tree is a big plant.

Parts of a Tree
C. HOW PLANTS GROW

1. Basic Concept:

Plants depend on physical things to grow.

2. Classroom Procedure:

a. Discuss why the plants taken out of the ground the previous day have died. What do plants need to live? Soil, water, light, air.

b. Experiment (1) to demonstrate that plants need soil.

Materials needed: pebbles, jar, garden soil, flowerpot, seeds.
- Put some pebbles, bean seeds, water, in a jar. Do not let the water in the jar get too low. Also plant some bean seeds in a pot filled with good garden soil. Keep soil moist.
- Observe what has happened after four days, one week, three weeks.
- Have each child record what happened, using labelled drawings on 9"x12" newsprint folded in four.

First day 4 days later

1 week later 3 weeks later
c. Experiment (2) to demonstrate that plants need good soil.

Materials needed:
1. identical jars or flowerpots
2. bean seeds or plants (soak beanseeds overnight to speed germination)
3. soil - sand for one jar, clay for one jar, humus for one jar.
4. heavy paperbag
5. plastic bag.

Plant bean seeds in each of the following: sand, clay, humus.
Observe the immediate results of plants in different soil.

Results: Sandy soil absorbs water faster than clay; clay soil will hold more water and hold it longer; humus is loose, holds air and moisture.

Thought questions:
Have students guess what will happen to soils for the following week. Can a plant have too much water? How do the roots of plants grow in sandy soil? in clay soil? in humus? How can one enrich the soil? How can one aerate the soil? Do all plants need the same kind of soil?

D. Experiment (3). Plants need water. Place two plants in the sunshine. Water plant A each day, do not water plant B.

Thought questions:
Would the same result be possible with different kinds of seeds? Is it possible to give a plant too much water? How can you tell if a plant is receiving enough water? too much water?
e. Experiment (4). Plants need light: (grow towards the light)

Place one plant in direct sunlight. Cover the other pot with a paper bag.

Thought questions:
What would happen if the paper bag were switched in the middle of the test period? What would happen if a heavy, clear cellophane were placed over one plant instead of an opaque paper bag? Is there any difference during the first few days when both plants break through the soil?

f. Experiment (5). Plants need air: Procedure: Place one plant anywhere in the room, tie a plastic bag over another plant.

Suggestion: One plant may be used as control for all four experiments.

g. Have a brief discussion on taking plants from their natural environment and what man must provide.

D. VEGETABLES

1. Basic Concept:

The vegetables we eat are parts of plants.

2. Classroom Procedure:

a. Have some vegetables in the classroom. Ask: What are vegetables? Are vegetables plants? How do you know. What part of vegetable plants do we eat? We eat either the leaves, root, stem or fruit of vegetable plants.

b. Visit a vegetable garden if possible to see how they are grown. If possible, let the class plant a little garden.

c. Hand out worksheet. After cutting out the vegetables, let the children paste each part of the vegetable where it belongs on a 9"x12" newsprint divided into four parts (for leaves, stem, roots, fruit).
1. Colour vegetables
2. Cut out vegetables
3. Paste each vegetable where it belongs
(roots, fruits, leaves, stems)

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1. **Basic Concept:**

There is great variety and similarity within the plant kingdom.

2. **Classroom Procedure:**

Class projects: (1) Have the class make a leaf (with picture of tree beside each leaf) or a seed collection. Discuss: What makes a good collection? (2) Have the pupils plant many different seeds and have them record how fast they grow and differences in leaves, etc.
UNIT V

ANIMAL LIFE
A. THE REALM OF ANIMALS

1. Basic Concept:

   There is a Plan (of God) for the realm of animals.

2. Classroom Procedure:

   a. Display the picture-chart again used during Unit I, God's Plan.

      Have some animal(s) in the classroom. Ask: How is an animal
different from a thing? From a plant? What can things do? plants? animals? Conclude: all animals move around, grow and
they have senses; they can smell, see, hear, taste, touch. Let
the children find examples of how animals move (walk, swim, crawl,
fly, etc.) and how they sense) dog follows trail; bird must see
food; bees taste; cat finds its way aided by long whiskers, etc.)

   b. Make a new chart together of the main groups of animals (mammals,
birds, amphibians, reptiles, fish, insects). Discuss obvious
differences. Ask: Do all animals move? grow? sense? The
different groups of animals and the ways in which they are alike
show us something of God's Plan for the animal world.

   Use filmstrips, slides, or movies, instead or next to pictures
whenever possible.

   c. Provide the pupils with a worksheet, or let them draw their own
picture of God's Plan for Animals.
Let the class act out how animals move or what sounds they make.
B. **WHAT ANIMALS NEED**

1. **Basic Concept:**

   Animals need air, food, and water to live. They breathe in different ways and they eat different kinds of food.

2. **Classroom Procedure:**

   a. Have an animal in the classroom. Introduce the animal to the class by discussing what this animal needs. What are some of the things we need if we want to keep the animal in the classroom? The animal needs a box or a cage. What kind of box or cage does it need? Can we keep the animal in a closed box? The animal needs air to breathe. What else does the animal need? Food and water. Make up a small chart to tape to the cage:

<table>
<thead>
<tr>
<th>I am a kitten.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I need: fresh air</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>clean water</td>
</tr>
<tr>
<td>fresh milk</td>
</tr>
<tr>
<td>meat</td>
</tr>
<tr>
<td>clean cage</td>
</tr>
</tbody>
</table>

   b. Continue discussion. Do all animals need air? Do all animals breathe air in the same way? Does a dog breathe in the same way as a fish? A fish breathes air, but he takes the air out of the water. A dog or cow cannot breathe air when they are under water. A fish cannot breathe on land. Some animals (frogs) can breathe both under water and above water.

   c. Do all animals need water? Do all animals need the same amount of water? Some animals can live much longer without water than others (camel). Do all animals eat the same food? Does a cow eat the same food as a lion? Does a fish eat the
same food as a bird? Does a fly eat the same food as a snake?

Some animals eat plants, others eat other animals (meat). Together make up a chart. (Note: God created plants first - animals need them to live and grow. See diagram below: God's Plan for Creation.)

### ANIMALS EAT DIFFERENT FOODS

<table>
<thead>
<tr>
<th>animals that eat plants</th>
<th>animals that eat other animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>cows</td>
<td>birds</td>
</tr>
<tr>
<td>mice</td>
<td>lions</td>
</tr>
<tr>
<td>squirrels</td>
<td>snakes</td>
</tr>
<tr>
<td>birds</td>
<td>whale</td>
</tr>
<tr>
<td>rabbits</td>
<td>turtle</td>
</tr>
<tr>
<td>deer</td>
<td></td>
</tr>
</tbody>
</table>

d. Have children draw a picture of an animal that eats plants, and another of one that eats meat (animals), or show filmstrip, slides, or movie about animals.
C. FARM ANIMALS

1. Basic Concept:

Farm animals (mammals) breathe air, are furry, give birth to baby animals, and feed milk to their young.

2. Classroom Procedure:

a. Ask: Have you ever been to a farm? Do you know any farm animals?

List them (mammals only). Use pictures or filmstrips of farm animals. Do all these animals have hair? What does the cow feed to the calf? What do other animals feed to their young? Do they all breathe air? Do these animals lay eggs or are their little animals born alive? (How do these animals keep warm in summer? in winter? Warm-blooded) All these animals are called mammals. Do you know what a baby cow is called? Calf. (Horse - foal; pig - piglet; sheep - lamb; goat - kid.) All these animals live on a farm. The farmer gives them food.

b. Pets. Do you know some pets which are mammals?

Dog? Does it have hair? Feed milk to young? Breathe air? Are young born alive? Then they must be mammals.

Collect pictures of different dogs to show the large variety. Make a classbook.
D. THE BEAR (CHOOSE ANY MAMMAL)

1. Basic Concept:
   The bear is a mammal.

2. Classroom Procedure:
   a. (Use reprint from the World Book Encyclopedia)
      Through pictures study the physical appearance of the bear.
      1. small eyes - cannot see well; 2. small ears - can hear fairly well; 3. short legs; 4. large feet - 5 toes - large claws (used to dig up roots, ants, food); 5. thick fur - protection (roomy skin); 6. excellent sense of smell.

   b. Through pictures show that there are different kinds of bears, i.e. Grizzly Bear, Black Bear, Polar Bear, Sun Bear, etc. (they all have the same basic features) - diversity!

   c. How a bear lives.
         Male and female live together for short time.
      2. Habits - try to avoid a fight
         - run from danger
         - short-tempered, gets angry quickly
         - will attack when threatened (cubs, food, home)
      3. Food - meat-eating animals; mice, ground squirrels, fish.
         Also: acorns, berries, fruits, roots of plants etc. Are fond of honey - fur protects them from bee stings.
      4. Winter sleep - not true hibernation
      5. Cubs - born during mother's winter sleep.

   d. Make a classbook about bears.
E. HOW TO CARE FOR ANIMALS

1. Basic Concept:

We must provide the basic needs of tame (farm animals and pets) and captured, wild animals (in the zoo).

2. Classroom Procedure:

a. Discuss with the class the animals in the Zoo. Has man provided the animal's basic needs. (example: The Polar Bear) What needs has man provided? What needs has man not provided? When we remove an animal from its natural home, and bring it into our home as a pet, or keep it in the zoo, we have the task of caring for them properly and providing their needs.

b. Do pets also have to be cared for? Let's talk about pet rabbits. (Choose any pet.) What do they like to eat? What else do they need? Can we expect a pet rabbit to find his own food and home? Who has to give these to him? Let's find out what the wild rabbits eat, where they live, and how they take care of themselves, then we will know how we care of pet rabbits. Make a chart of rabbits.

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<table>
<thead>
<tr>
<th>RABBITS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture of wild rabbit</td>
<td>Picture of pet rabbit</td>
</tr>
</tbody>
</table>

The wild rabbit eats any plant he can find. Sometimes he eats the farmer's cabbage. The wild rabbit lives in a burrow. The wild rabbit must listen for his enemies. He needs to run fast.

John's rabbit likes to eat lettuce, carrots, and rolled oats. John's rabbit lies in a clean pen. John's father made the pen. No one will hurt John's rabbit because there is a fence around him.
UNIT VI

MAN USES, DEVELOPS AND PRESERVES
Unit VI: Man Uses, Develops, and Preserves

Introduction:
The pupils have discovered that the earth around them is made up of many parts; the four realms within creation; what makes physical things, plants and animals. They have learned that this is all a part of God's Plan. In this unit we will look at a part of God's Plan for man. In this plan God has given man physical requirements for life.

General Objectives:
In fulfilling the physical requirements for life man fulfills part of the task which God has given him.
People use the creation in different ways to fulfill their physical requirements.
A. PHYSICAL REQUIREMENTS FOR LIFE

1. Basic Concept:

Air, water, food, shelter, and clothing are the physical requirements for life. This is a part of God's plan.

2. Classroom Procedure:

a. Ask: Make a list of the things you do every morning. After a substantial list has been offered; Which are the most important? What would happen if you did not breathe? What would happen if you did not drink? What would happen if you did not eat? What would happen if you did not sleep? Why do you need a place to live? Why do you need clothes? Does everybody? Discuss: Food, shelter, rest, air, water and clothes are essential to life. Show a selection of pictures (filmstrips, films) of people carrying water, building, harvesting, skin diving etc. Use pictures of grown-ups and children. Use people of different races. Ask the children to find out what need is being taken care of in each picture.

b. Choose several children who have a baby brother or sister at home. Form a panel. Show pictures. Have the class discover by asking questions what the needs of the baby are. Which of all the needs are most important?

Once the children have determined that physical needs are more basic other needs, have them compare the physical needs of adults with those of children. What do they all need? How are their needs the same? How are they different? Using contrasts, relate the questions to the pictures. Can any of them live without water? without pajamas? Can any of the babies live without air? without bubble gum? Can the lady live without food or without books? Can the man live without a house or without a radio? Can the girl live without clothes or without a watch?
B. TOOLS HELP MAN

1. Basic concept:

In responding to the physical needs for life, man invented aids which we call tools or machines.

2. Classroom Procedure:

a. Bring up to the front of the classroom a pencil, a hockey stick, a baseball glove, a pair of scissors, a hammer, a screwdriver. Ask the children how these things help people to make things. They help people to write. They help people to play hockey. They help people to cut things out. We call these tools. People use tools to help them to do their task.

Ask: Look around for other tools. They help us to do and to make things. Point to such things as the pencil sharpener, the yardstick, the chalk, the door, and the hinges. Ask: Why do people make all these tools? People use them to help them do their work.

Ask: Think of some tools and machines that your mother uses; that your father uses.

If there is something being made in the neighbourhood, ask the children what tools those people use to help them to do their work.

b. Make a classroom mural. Entitle it:

ALL PEOPLE USE TOOLS AND MACHINES TO HELP THEM DO THEIR WORK

Have the children cut out all the tools and machines they can find in magazines. Have them put them on the mural.

c. Have each child fold a sheet into four parts. Entitle the parts:

1. Tools I use.

2. Tools my teacher uses.

3. Tools my mother uses.

4. Tools my father uses.

Have them draw pictures of these tools in each part.
d. Show a film on farming or industry to the children. After the film have a discussion about all the tools that helped the people in the film to do their work.
C. AIR: A PHYSICAL REQUIREMENT FOR LIFE

1. Basic Concept:

All people need air to live.

2. Classroom Procedure:

a. One child puts a bag over his head. Ask the class where they would make a hole, so that he could get air.

Ask: How do we get the air we need? Ask the class to hold their noses. Why can we not do this all the time? (We need air to live).

Ask: Where is the air? Can we ever use up all the air? (No, there would always be enough). If you would be locked in a refrigerator, would you have enough air? (No, all the breathing air gets used up. Soon you would have to open the door to let in more breathing air.) When you go swimming why can you not stay under the water? (because we need to come up to get air).

Show the children a picture of a diver under the water with an oxygen tank. Ask: Can he stay under the water longer than you? Why? Does he use his nose and mouth to get air? Where is the air he is using? (It is in the container on his back.) He must take the air with him.

Sometimes divers take along tubes with them under the water. The air comes from above the water. Does a submarine need to take air with it? Where is the air? When you go really far away from the earth there isn't any more air. How do the astronauts get air? (They need to take the air with them also). They have a tank in their spaceship that gives them enough air.
Do you know what a mine is? People also go deep inside the earth to dig special stones and minerals. There is a long pipe which goes down into the mine to give the miners enough air.

b. Divide a large sheet into four sections. Have the children draw in each section a picture.

Section 1. How we get air. (nose, mouth)
Section 2. How does the diver get air?
Section 3. How does the astronaut get air?
Section 4. How does the miner get air?
D. WATER: A PHYSICAL CONDITION FOR LIFE

1. Basic Concept:

All people need water to live.

2. Classroom procedure:

a. Have the children who are thirsty go to the drinking fountain and take a drink of water.

Ask: Why are there drinking fountains around the school? How do you know when you are thirsty? What would happen if you did not drink any water?

Show pictures of people from other lands getting water. Show pictures of someone getting water from a faucet. Show pictures of a dam, a reservoir, a water tower, a pump, a lake, and a river.

Ask: Where did this lady get the water? What will she use it for? Why can she not get water from the faucet? Where does this water come from? Where is the water in the school? How does it get there? What do pipes do? How does the water get into the pipes? How does the lake get water?

b. Give the children a worksheet to colour. Entitle it, "How do we get our water?" In the city? In the country? Discuss the worksheet with them.

c. You could also have each child draw a picture of how other people get the water they need.
E. WATER: MANY USES

1. Basic Concept:

Water is used for many different purposes.

2. Classroom Procedure:

a. Ask the children how many faucets there are in their homes. What is the water used for? What does your father use it for? What does your mother use it for?

Display illustrations of situations that require water. Ask: What do you think that water is used for in the pictures?

Ask: Count the number of times you use water in a day. (Drinking, washing, playing, growing, etc.)

b. Make an Experience Chart of how people use water.

<table>
<thead>
<tr>
<th>USES OF WATER</th>
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</thead>
<tbody>
<tr>
<td>Drinking</td>
</tr>
<tr>
<td>Washing</td>
</tr>
<tr>
<td>Cleaning</td>
</tr>
<tr>
<td>Watering Lawn</td>
</tr>
<tr>
<td>Washing Car</td>
</tr>
<tr>
<td>etc.</td>
</tr>
</tbody>
</table>

c. Pass out magazines. Have each child cut out and glue in his workbook (or on paper) a picture (pictures) related to the uses of water.
F. FOOD: A PHYSICAL CONDITION FOR LIFE

1. Basic Concept:
   All people need food to live. Because they live in different places, people eat different foods.

2. Classroom Procedure:
   a. Display pictures (filmstrip, film) of different people gathering and eating different foods.
   Ask: What did you do this morning before you came to school? (or during lunch hour?) Why did you eat? How many times a day do you eat? Does everybody eat? How do you know when you are hungry? Pointing to the pictures ask questions. What is the woman gathering? Did the man plant the lettuce? What will they do with it? How will they prepare it to eat? Lead the children to an understanding of the process of seeding, growth, harvesting etc. What do these people need to get their food? Animals, fish, plants, trees. Ask: What do you eat? Do you eat whale meat? Do you eat coconuts? Could you grow bananas in the snow? etc.
   b. Make an experience chart from the above discussion.

1. All people need food to live.
2. All people get the food from the creation.
3. All people use tools to help them.
4. Some people eat different foods.

c. Have available for the children a pile of magazines. Have them cut out foods they eat and foods they have never eaten. They could paste these on a paper folded in two. e.g.
<table>
<thead>
<tr>
<th>FOOD THAT I EAT</th>
<th>FOOD THAT OTHER PEOPLE EAT</th>
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Food

Then | Now

[Diagrams of farming tools and processes, showing the transition from traditional to modern methods.]
G. HOW WE GET BREAD TO EAT

1. Basic Concept:

There are many steps involved in supplying our need for food today (e.g. bread).

2. Classroom Procedure:

a. Review with the children the foods that we eat. We shall find out how we get the bread we eat into our homes. (The teacher could use any food-- meat, eggs, sugar.)

b. Pass out a worksheet (next page)

(1) Which picture comes first? What is happening in the picture? What did the farmer have to do before he could cut down the wheat? What did the farmer use to plant the wheat? How does the farmer take care of the wheat while it is frowing? (Maybe some children have been to the prairies. They could relate their experiences to the rest of the class.)

(2) Which picture comes next? How does the wheat go from the farm to the flour mill? What happens at the flour mill? (Maybe some children have been to a flour mill. Let them relate their experience. If there is a mill in the neighbourhood, a trip could be planned.)

(3) Which picture comes next? Who is using the flour? What does he do with the flour? Does your mother bake bread? What tools does the baker use?

(4) Which picture comes next? Why does the bread go to the store? Does all bread go to the store? Can you buy bread at the bakery?

(5) What happens to the bread in the last picture?

c. Have children number the pictures in their correct order and colour them.

d. In a follow-up lesson make a chart of all the tools used. Children could find pictures in magazines to put on the chart.
HOW WE GET OUR BREAD

Store

Bakery

Our House

Farm

Flour Mill

FLOUR
H. CLOTHING-- A PHYSICAL CONDITION FOR LIFE

1. Basic Concept:
   People use the creation in different ways to fulfill this need.

2. Classroom Procedure:
   a. Bring to the classroom pictures of people from other lands.
      Pointing to each picture ask questions. Why is this boy wearing so many clothes? What are his clothes made of? Why did he make his coat out of fur? Why is this man wearing so many clothes in the desert? etc.
      Ask: (pointing to pictures) Where did this person get his clothes? How were they made? (Work the questions back to plants, animals, etc.) All things we need and use we get (make) from the creation.
      Ask: (pointing to pictures) What did this person need to make this garment? How did she make it? Where did this Eskimo get the seal skin? All perople need tools to make their clothes.
      Hold up the pictures and ask the children questions directed to discovering that some people wear a certain type of clothing because they like it, or because of belief, or because it is part of a team?
      Point to the special clothing used for rituals. Point to the covered faces of women of other places. Why is she wearing so many bracelets? Why does this person paint bright colours on his clothes?
   b. Make an Experience Chart from the above discussion.

   1. All people wear clothes.
   2. Some people need to wear very little, others very much.
   3. All people get their clothes from the creation.
   4. All people need tools to make their clothes.
   5. People wear special clothes for special occasions.
c. Fold a sheet in half. Have children glue on one side pictures of clothes they see everyday. On the other half glue pictures of clothes worn by people of other places. A good title could be...

ALL PEOPLE WEAR CLOTHES

WE OTHERS
I. HOW WE GET OUR CLOTHES

1. Basic Concept:

There are many steps involved in supplying our need for clothing (wool).

2. Classroom Procedure:

a. Discuss Where did the Eskimo get his fur coat? Where did the lady living in the jungle get her leafy skirt? (They hunt for animals. They use the plants. They use the creation.) Where do our clothes come from? Lead this back to cotton, wool, leather, silk, flax, etc. We shall find out how we begin with wool to get some of our clothes.

b. Pass out a worksheet (see next page). Which picture comes first? Why does this picture come first? What is the farmer doing? How does he get the wool from the sheep? (There are some excellent movies available on this.) Every year there are more baby sheep (lambs). Why is this important? Does the farmer need to care for the sheep? How can he do this? (Feeding, shelter) What does the farmer do with the wool that comes from the sheep? Where does it go from the farm? Which picture comes next? What is happening in the picture? Explain to the children what happens at the mill. Which picture comes next? What is happening in this picture? What did they do with the cloth? What are they using? What other tools would they need? Does your mother do this? Where does she get her cloth? Which picture comes next? How did the clothes get there? What did he have to do before he bought? (Fit it) The clothes factory makes all clothes in sizes.

Where is the man taking his clothes?

BACKGROUND INFORMATION FOR TEACHER

Note: All the names of the animal species.
wool is combed. Then it is washed and dried. It is then teased to
take out any tangles and knots. It may be burred with machines to
remove the burrs or knots. Then the wool is blended either with other
kinds of wool or other kinds of cotton. Next it is straightened into
fibers, preparing it for spinning and weaving it into cloth. After
the cloth is woven it must be shrunk. If this is not done the clothes
would shrink when first washed. Then the cloth is pressed and steamed
and sent to the clothes factory.

c. Have the children number and then colour the pictures.

d. In a follow-up lesson make a chart of all tools and machines used.

Children could again find pictures in magazines to glue on the chart.

e. Make a chart showing the materials and pictures of their sources.

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<thead>
<tr>
<th>Material</th>
<th>Sample</th>
<th>Picture of Source</th>
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<td>Wool</td>
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f. Art idea: Use construction paper and do some weaving.

g. Ideas: (1) Take the children to a clothes factory.

(2) There are films available on shearing sheep.

(3) Bring some patterns to school and explain to the children
why we use patterns. Ask: Do the Eskimos have patterns
like these?
J. **SHELTER: A PHYSICAL CONDITION FOR LIFE**

1. **Basic Concept:**

   People respond to the requirement for shelter (houses) by using the creation in different ways.

2. **Classroom Procedure:**

   a. Set up a display of pictures of different houses in other parts of the world.

   Discuss: What is this house made of? Where would you find this house? Why does this house have a pointed roof? Why is this house made of snow? Why is this a tent house? What was used to make this house? Where would you find a house like this? What did he need to build his house? How did he get the tree down? How did he make this window? What does this man have to make before he puts the skins on? Why is this house on stilts? (To keep floor dry? To keep out crawling animals? To allow cool air to circulate under and around the house?) Why are these two houses different? Allow the children to discover that the climate and environment (creation) affect the way people build their houses.

   b. Make an experience chart.

   1. All people live in houses.
   2. All people use part of the creation to make their houses.
   3. All people use tools to make their houses.
   4. Some houses in other lands are different.

   c. Have children collect and draw pictures of different kinds of houses from other lands to make a classroom "television show". Paste pictures on a long strip of shelf paper or wrapping paper. Attach the strip of paper to rollers (cardboard tubing or a round stick) at both ends. Use a cardboard box for T.V., cutting an opening in the top and cover with black paper.
K. **STEPS IN MAKING A HOUSE**

1. **Basis Concept:**

   There are many steps involved in supplying our need for shelter (e.g. wood).

2. **Classroom Procedure:**

   a. What do we need to build a house? After a substantial list has been made, choose the materials that man gets from creation. Where do we get the wood? Where do we get the cement? Where do we get the shingles? Where do we get the nails, bolts, screws etc.?

   Say: Let us find out how we get wood from the forest to our house.

   b. Pass out worksheet (see next page).

   Which picture comes first? Why? What are the men doing? Where are the trees? Can the forest ever be used up? How do people help keep the forests? Do you think we should? Why? What tools do people in the picture need? How do the logs go from the woods to the sawmill?

   Which picture comes next? What happens to the logs at the sawmill?

   What tools are the men in the picture using?

   Which picture comes next? What happens at the lumberyard? Who goes to the lumberyard to get what he needs?

   What is happening in the next picture? What else does the carpenter need? Make a list of everything the carpenter makes out of wood?

   What will happen when the house is all finished? (People will make it their home.)

   c. Have the children number pictures in their correct order and colour the pictures (Worksheet).

   d. Have children make a mural of everything made out of wood in a house.

   They can draw pictures or cut them from magazines.

   e. For a follow-up lesson make a chart of all the tools uses.

   f. If there are houses being built in the area go and see it with the class.

   g. This lesson could also be taught as "Steps in building a House." Start
1. **Basic Concept**

In responding to their physical requirements for life, people have always used tools and machines. These tools and machines may change in time, but they are still aids in helping people to fulfill their task.

2. **Classroom Procedure**

   a. **Discussion:** Refer to tool charts that were made from previous lessons.

      Ask: Why did people need these tools and machines? (To help them do their work. To make their work easier.) Pointing to charts ask:

      Do you think people long ago needed food? Do you think people long ago needed clothes? Do you think people long ago needed houses to live in? Establish that people everywhere now and then have these needs.

      Discuss: Pointing out the tools and machines ask: Did people long ago do this? Establish that tools and machines change as man discovers new and better ways for the tools and machines to help him do his work. What do you think the first pioneers in Canada used to get food? to make clothes? to build houses? What do you think they had to do?

   b. **Pass out worksheet (see next page) showing how the tools have changed in time.** Point out that people are still doing the same thing but using different tools.

      Ask: Is this man clearing the land? Is this man making the land ready? Is this man using something to keep the logs firmly fastened together? etc. (This can be done for each pair of pictures).

   c. **Ideas:** (1) Movie-- "The Settler" shows how a group of settlers in northern Quebec clear the land to build homes, clear the land to grow crops. It shows how machinery changes even during the short time this group of settlers live there.
Unit VII

Man

All people belong together.

People grow and change.

Every man is special.

People need each other.

Family

-God has a plan for the family

-Family; Parents and Children

-Loving and Caring in the Family

-The task of Each Family Member

-Rules in the family

-The Family- A Launching Pad

-Families in Other Countries
UNIT VII
LIVING AND WORKING TOGETHER

Man and his task

Objectives: To discover that although people are different in many ways, they are all man and belong to mankind.

To show that, although all people belong to mankind, each person is unique.

To show that people grow and change constantly.

To show how people need each other in various ways and how God binds them together in many relationships in order to fulfill their task.

Mankind Bibliography


A. All people belong together

1. Basic Concept: All people belong together because they have one main task; man is different from things, plants, animals. Since all people belong together they are all alike in many ways.

2. Classroom Procedure:
   a. Cut out things, plants, animals, and people from magazines. Cut these up so that there are arms, legs, heads, twigs, leaves, stems, etc. Use a variety of things (tables, cars, etc.) plants, (trees, flowering plants, non-flowering plants, etc.) animals, (lions, cow, mouse, etc.) and people, (male, female, black, white, child, adult, etc.) Have these all jumbled up. Let the children fit together the various parts and classify them into the four groups; things, plants, animals, and man.

   Why do we distinguish between these groups?
   Why do things belong together? What do they do?
   Why do plants belong together? What do they do?
   Why do animals belong together? What do they do?
   Why do people belong together? What do they do?
Put up many different pictures of people in action. Some of the people should be male, others female, some black, others white, some tall, others short, etc. What are the people doing? Discuss the children's answers.

Can everyone do these things? Can all people move, eat, laugh, cry, climb, sleep, save, paint, have fun, make things? Can you do all these things? All the children can do these things. They all belong to man. People can do many things that things, plants, and animals cannot do. People are a special group.

B. All people are different

1. Basic Concept: Although all people belong together people are different in two main ways: male - female, race or colour (black or white, etc.) They also differ in other ways: young and old, big or small, fast or slow, rich or poor, wise or foolish.

2. Classroom Procedure:

a. Divide the class into two groups: boys and girls. How are the groups different from each other? How is the group of boys different from the group of girls? Do fathers and mothers, husbands and wives, men and women, have something in common? They all work on the one task. Man and women; even though different, belong together.

b. Show pictures of people from different races. Ask: How are they different? Can they move, cry, laugh, eat, etc.? Can the black child on this page be a good runner? Can these girls be good students? Could that boy be the most interesting fellow of the group? Such questions will help the child realize that nobody can predict a person's non-physical characteristics by looking at his picture. A person's race makes no difference in the fact that he too contributes to man's task.

Black or white, red or yellow - every person is a whole man and belongs together.

c. The same can be done with young and old, tall and short, fast and slow, rich and poor, sick and healthy, wise and foolish.

For example: tall or short

Have all children stand up. Let the tallest student and the shortest student come forward. Although they are different in size they can do many things the same. Some activities are easier for a tall person, some are easier for a short person.
C. People grow and change

1. Basic Concept: Although people are all alike, they grow and change in various ways.

2. Classroom Procedure:
   a. Show pictures of a baby, a child, and a grown-up. Ask the children how these pictures are different.

   Does the baby look like the child? Can the baby do the same things the child can? Is the grown-up the same as the child? the baby?

   b. Have the students bring a baby picture of themselves to school.

   How have you changed? Do you still look the same as when you were a baby? Do you do the same things? Do you move, eat, speak, make things, laugh, cry in the same way as when you were a baby?

   Do you know (understand) more now than when you were a baby? Can you do things now that you couldn't do when you were a baby? Can you print now? Can you add now?

   How are you different from your parents? Can you drive a car like your father? Can you cook like your mother?

   How are your grandparents different from your parents? Can they work as hard? Are they wiser than you or your parents? Why?

   Change in growth is necessary so that all of us can help to do the big task. Some of us are just beginning the task and others are just about finished.

3. Children's Work:

   Have the children draw a picture of themselves as babies and as they are now. Let them write a story about the changes that have taken place.
D. Every man is special

1. Basic Concept: Although all people are alike every person is special or unique and has his own task to do.

2. Classroom Procedure:

Does everyone weigh the same? Does everyone have the same height? Does everyone have the same hair colour? Does everyone walk the same way? Does everyone laugh or cry about the same things? Does everyone eat the same foods? Can everybody study equally well? Does everybody have the same friends?

More important is that not everyone likes to do the same thing. Some like reading, some like singing, others prefer social studies, others prefer arithmetic. A person likes to do certain things because he has different gifts. Everyone has certain gifts. Since there are many jobs to be done, everyone can use his special talents. Every man ought to find a job suitable to his gifts.

Each person, because he is special and has special gifts, has his own thing to do in helping mankind fulfill the big task.

3. Children's Work:

a. Have each child glue a picture of himself in the workbook. Let them draw a self portrait with it. (It expresses who they think they are).

b. Have the students write about:
   "If I could choose my task now I would choose...." or
   "I think I can help man........"

c. Let the students read their choice to the class and have them explain why they chose it.

E. People need each other

1. Basic Concept: Since people belong together, they need to work together in teams in order to do their work.

2. Classroom Procedure:

Show the children a picture or movie on building a house. Could one person build a house? He might. It would take long. Many people come together to build the house. Name some of them. They need each other to do the job.

List all the people that work to keep a store running.
Which people are involved in maintaining a farm, a church, a factory, or a library?

Many more examples can be explored and discussed. A rich variety should be discussed.

Show pictures, filmstrips, movies, etc. Even if a discussion does not take place the child should have enough material to compare with.

In this lesson mention can be made of the male and female grouping. Although there is a difference between these two groups, both groups work on the big task; each in their own peculiar way. It takes men and women, it takes many people to develop creation.

3. Children's Work

Let the students discuss pictures in groups of four - name the jobs of the people. Let them read simple books for themselves about people at work.
Family and Marriage

Introduction

This unit is written from the Biblical conviction that marriage and the family are not inventions of mankind. Marriages and families are responses to the law-words of God for marriage and family. Two people just living together do not constitute a marriage. They must be living together in a certain way - the way of marriage. A man, woman and child are only family because they live in response to the structure for the family.

Marriage and the family continue to be recognized as marriage and family despite the variety of forms which have arisen on account of varying historical conditions and various human responses. The many changes in marriage and family forms throughout history are different forms of the basic inviolable structures for marriage and family.

There is a wide variety in forms, yet the structures for marriage and family remain constant. A family remains a family; it never becomes a business or a football team, etc.

In studying this unit on marriage and family, it is important to be aware of the basic structures for the marriage and family. Marriage is the bond of fidelity or troth between one husband and one wife based on sexual union. Family is the bond of fidelity or troth between father and mother and their children based on blood ties. Parents are to lead their children so that they can become responsible members of the Body of Christ. Children are to be willing to follow the leading of the parents. In this way they honour their parents. The home is a place of rest (where children learn to become themselves); it is a place of guidance (where children learn that they are to please God and not themselves); and it is a place of adventure (where children are stimulated to enjoy living in God's world).

God blesses when His Word is fulfilled. (Gen.1:28) For Bible references on the task of the parents, read: Deut. 5:1-9, Psalm 78:1-8, Psalm 105, Ephesian 6:4. The following passages refer to the task of the children: Exodus 20:12, Deut. 5:16, Ephesians 6:2-3, Coll. 3:20. The Bible stresses the shortcomings of parents more than those of the children because the sin of the children is often preceded by those of the parents. Read: Exodus 20:5-6, Ephesians 6:4, Coll. 3:21, Matt. 19:14.

The lessons about the interaction of the family with other societal structures are mainly to show the unique place of each. The family has its own structure. When the school, the state, or the church overrule the family, distortion and eventually destruction is the result. Other societal structures then invade the home.

A look at families in other countries, helps the child understand that, although the family is always with us, the forms of the family, the details of family life, can vary from culture to culture and from age to age.