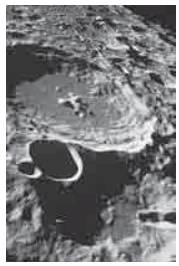
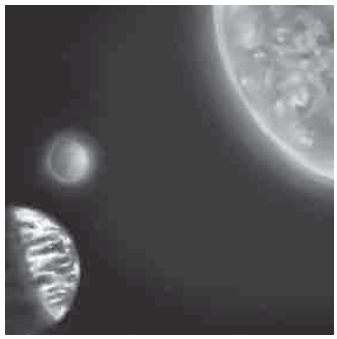
Everyday Science

Teacher's Guide 1



Contents

Introduction	Page 3
Unit 1 Science	Page 7
Unit 2 Animals	Page 9
Unit 3 Plants	Page 12
Unit 4 Matter	Page 15
Unit 5 Heat and light	Page 18
Unit 6 Air	Page 21
Unit 7 The Sun and Stars	Page 24
Unit 8 The Moon	Page 26
Unit 9 The Earth	Page 28
Sample lesson plan	Page 31
Assessment	Page 32

Introduction

Children want to know things. Early guidance and varied experiences do much to stimulate the development of their natural intelligence.

A teacher can play a very important role in arousing the interest of students by allowing them to discuss facts and ideas. The teacher can then help students draw conclusions from these facts and ideas as to why and how things happen.

The teacher can stimulate the thinking process of students by asking questions and encouraging them to ask their own.

Experiments allow students to test the facts that have been learnt by them for themselves, thereby clarifying the reasoning behind the activities that are done in class.

This course has been developed to provide information about the world around us, on which students can base their opinion, verify information, come to conclusions, and use the knowledge they have gained in their everyday lives. It will help gain and maintain the curiosity and enthusiasm of students who have just started studying science. Concepts developed at this stage will be of use later in their studies at an advanced level. It will help them develop a better outlook on life.

About the Pupil's Book:

This science series, now completely revised, has been written especially for primary level students. It provides information suitable for each student's level of understanding and has a direct appeal to students who need engaging and easy to read material. Baring in mind the interests, abilities, curiosities, and needs of students, it provides stimulating learning experiences that offer enjoyable educational motivation, thus serving as a foundation base for future learning.

The keyword in science is curiosity. The material in this series is designed to create in a child the same urge that motivates a scientist; the desire to know the answer to a question. A wide range of topics were carefully selected that will interest and inspire students.

Teachers will come to see that this series deals with those broad areas about which, most students frequently express curiosity; that it provides answers to many of the questions they ask, and offers new and exciting information in many fields.

The language is simple and easy to read, catering for the students, range of abilities in each grade. Together, the text and illustrations motivate children to discuss, question, and explore.

The contents have been selected and presented in such a way as to capture and hold the interest of the students. The objective is to simplify complex ideas and present them in an interesting way. Every effort has been made to keep the language simple.

When it is necessary to use a specialized word, it has been used. When it is not self explanatory within the context, it has been defined. Clear and well-labelled illustrations have been included, which help identify and clarify the topics that are dealt with.

Good pictures and diagrams arouse and develop interest. These make lasting impressions. They help make the text clear. They also appeal to the child's imagination, while satisfying their curiosity and often provoking a favorable reaction.

Simple, practical, interesting and stimulating presentation of factual materials— offer every chance of successful learning experiences. Knowledge of problem-solving techniques, that if acquired can be applied in everyday life.

It is intended, through this series, to introduce children to many of the interesting and enjoyable things in science they can learn about and do for themselves. The series also intends to develop in them a quest for knowledge and an understanding of how science is shaping the world in which they live.

The role of the teacher:

It is up to the teacher to devise ways and means of reaching out to the students, so that they have a thorough knowledge of the subject without losing interest.

The teacher must use his/her own discretion in teaching a topic in a way that he/she feels appropriate depending on the intelligence level as well as the academic standard of the class.

To the teacher:

With your assurance and guidance the child can sharpen his/her skills. Encourage the student to share his/her experiences. Try to relate pictures to real things. Do not rush the reading. Allow students time to respond to questions and to discuss pictures or particular passages. It will enhance learning opportunities and will enable the child to interpret and explain things in his/her own way.

Introduction

Method of teaching:

The following method can be employed in order to make the lesson interesting as well as informative.

The basic steps in teaching any science subject are:

(i) locating the problem
(ii) finding a solution through observation and experimentation
(iii) evaluating the results
(iv) making a hypothesis and trying to explain it

Preparation by the teacher:
Be well-prepared before coming to the class.

(i) Read the text.
(ii) Prepare a chart if necessary.
(iii) Practise diagrams which have to be drawn on the blackboard.
(iv) Collect all material relevant to the topic.
(v) Prepare short questions.
(vi) Prepare homework, tests, and assignments.
(vii) Prepare a practical demonstration.

The following may also be arranged from time to time.

(i) Field trips
(ii) Visits to the laboratory
(iii) A show of slides or films
(iv) Projects

This common strategy is easy as well as effective:

(i) Before starting a lesson, make a quick assessment of the students' previous knowledge by asking questions pertaining to the topic.
Relate them to everyday observations of their surroundings or from things that they have seen or read about in books, magazines, or newspapers.
(ii) Explain the lesson.
(iii) Write difficult words and scientific terms on the blackboard.
(iv) Ask students to repeat them.
(v) Help students read the text.
(vi) Show materials, models, or charts.
(vii) Make diagrams on the blackboard.
(viii) Perform an experiment if necessary.

(ix) Ask students to draw diagrams in their science manuals.
(x) Students should tackle objective questions independently.
(xi) Ask questions from the exercises.
(xii) Answers to questions are to be written for homework.
(xiii) The lesson should be concluded with a review of the ideas and concepts that have been developed or with the work that has been accomplished or discussed.

Conclusion:

The teacher can continue the learning process not only by encouraging and advising the students, but also by critically evaluating their work.

It is not necessary that the lesson begins with a reading of the textbook. The lesson can begin with an interesting incident or a piece of information that gain interest of the students and they will want to know more about the topic.

The topic should then be explained thoroughly and to check whether the students are following or not, short questions should be asked every now and then.

Sketches and diagrams on the blackboard are an important aspect to the teaching of science, but too much time should not be spent on them as the students lose interest. An alternative to drawing on the blackboard is a ready-made chart or one made by the teacher can be displayed in the class. The use of visual material keeps students interested as well as helps them make mental pictures which are learnt quickly and can be recalled instantly. Pupils should be encouraged to draw with the help of the teacher. Diagrams that are not in the text should either be copied from the blackboard or chart, or photocopied and distributed in the class.

Simple experiments can be performed in class. If possible, children may be taken to the laboratory occasionally and shown speciments of plants and animals, chemicals and solutions, and science apparatus, etc.

Practical work arouses interest in science. Class activities can be organized in such a way that the whole class participates either in groups or individually, depending on the type of work to be done or the amount of material available.

It is hoped that the above guidelines will enable teachers to teach science more effctively, and develop in their students an interest in the subject which can be maintained throughout their academic years , and possibly in their lives as a whole.

These guidelines can only supplement and support the professional judgement of the teacher but in no way can they serve as a substitute for it.

Science

Objectives:
To define science
To identify various living and non-living things

Teaching strategy:
Draw an ant on the board and label it.
Ask: How many legs does an ant have?

Ask students what the colours of various things are.

Ask: Is jelly soft or hard?
Is ice hot or cold?

Ask about the size of various things.
Ask: Which is bigger, an elephant or a mouse?
What is the biggest animal in the world?
Can you pull a cart?
Can a kitten pull a cart?

Explain the difference between strong and weak with examples.
Ask if they know the story of the hare and tortoise.
Tell them the story then explain the difference between fast and slow with examples.

Ask: Where does a fish live?
Where does a rabbit live?
Where does a bird live?
Explain the living places of animals with examples.

Ask students what they think science is.

Tell students that science is when we use our senses to study the world around us.

Answers to Activities in Unit 1

1. a) six b) red
   c) green d) soft
   e) hard f) cold
   g) hot h) round
2. a) big b) small
   c) strong d) weak
   e) slow f) fast
3. a) six legs b) four petals c) world using our senses.

Additional activity

Choose the best answer :

a) A way of finding things out is called _____.
English Urdu Science [Science]

b) The number of legs an ant has is _____.
2 4 6 [6]

c) The coloured leaves of a flower are called_____.
petals sepals leaves [petals]

d) Tea is _____.
white hot cold [hot]

e) A horse is _____.
small strong slow [strong]

f) The colour of an apple is _____.
blue red purple [red]

g) The shape of a football is _____.
round square rectangle [round]

h) A mouse is _____.
strong big small [small]

i) A rabbit is_ _____.
fast slow strong [fast]

j) A stone is _____.
soft hard hot [hard]

Animals

Objectives:

To know the structure of an insect
To know the different types of insects
To know the different types of water animals
To know the structure of a small animal
To know the different types of small animals
To know the names of some wild animals
To know the names of some useful animals and how they are useful
To know the structure of a bird
To know the different types of birds

Teaching strategy:

Ask: What is the difference between a plant and an animal?
Explain that living things are of two kinds: plants and animals.

Ask: Can you name some animals?
Explain that animals are of many shapes and colours.

Show students a chart of various animals.
Write the names of insects.

Draw a rabbit on the board. Explain that a rabbit is a small animal.
Ask: Can you name some small animals ? Write their names on the board.

Draw a fish on the blackboard. Explain that a fish is a water animal.
Ask for the names of some water animals.
Write their names on the board.

Ask students if they know the names of any wild animals.
Write their names on the board.

Ask: What do wild animals eat?
Ask: Where do wild animals live?
Explain what wild animals eat and where they live.

Ask students why animals are useful?
Explain how some animals can be useful.

Ask: Which animals do we keep on a farm?
Ask: Which animals do we keep in the house as pets?
Explain how animals are useful to us.
Show the picture of useful animals in the book. Talk about them.

Ask: Where does a bird live?
Ask: How does a bird fly?
Explain that birds need wind to fly.
Ask the names of some birds.
Write these names on the board.

Teach students to draw simple drawings of some animals.

Answers to Activities in Unit 2

2 . a) elephant b) giraffe
3. a) lion - tiger b) cow - sheep c) duck - parrot d) butterfly - bee
4. a) no b) yes c) yes d) no
5. a) ant b) bee c) fly d) butterfly
6. a) mouse b) rabbit c) squirrel d) cat e) dog
7. a) whale a) deer
   b) starfish b) tiger
   c) dolphin c) lion
8. a) cow gives milk
   b) goat gives meat
   c) sheep gives wool
   d) horse pulls a cart
9. a) parrot b) crow c) duck d) sparrow e) peacock
10. a) fish b) rabbit c) fly

Unit 2 Animals

Additional activity

Choose the best answer:

a) Which of the following is an insect?
rabbit butterfly cow [butterfly]

b) Which of the following is not a living thing?
book ant fly [book]

c) Which one of the following is a big animal?
cat mouse whale [whale]

d) Water animals live in _____.
air land water [water]

e) Which one of the following is not a wild animal?
fox tiger goat [goat]

f) Birds fly with their _____.
legs wings tails [wings]

g) Which one of the following animals is not a farm animal?
horse cow monkey [monkey]

h) A sea horse lives in the _____.
ground sea garden [sea]

i) Which of the following is not a water animal?
crab starfish ladybird [ladybird]

j) Which is the biggest land animal in the world?
elephant giraffe hippopotamus [elephant]

Plants

Objectives:

To know the parts of a plant
To know the functions of each part
To know the various types of plants
To know how plants are useful
To know where plants can grow

Teaching strategy:

Draw a plant on the blackboard and label its parts.
Show a complete plant to the students and explain the function of each part.
Explain how fruits and seeds are produced. Cut some fruits and show the seeds.
Explain how seeds grow into new plants.
Explain non-green plants.
Explain how non-green plants get their food.
Draw various types of plants on the board. Write their names.
Ask: What is the difference between them?
Explain the difference in the size and strength of the stem.

Distribute leaves of various shapes to the students.
Show them the midrib and veins.
Explain the structure and function of the leaf.
Teach students to make a leaf print by rubbing a pencil on a piece of paper placed over the leaf.

Ask: How do we use plants?
Explain that some plant give us flower, vegetables, fruits and seeds. These plants are called useful plants.

Ask: Why are leaves green?
Explain the presence of chlorophyll.

Unit 3 Plants

Ask: How does a plant eat?
Explain how green plants make food in sunlight.
Draw a mushroom on the blackboard.
Ask: What is the colour of a mushroom?
Where does a mushroom grow?

Ask: What do we get from plants?
Explain the usefulness of flowers, seeds, fruits, vegetables, etc.
Ask: What is a table made of? Where does wood come from?
Explain that wood comes from the hard stems of trees.
Ask: What things can be made from wood?

Show the students a water plant growing in a glass jar.
Ask: Can plants grow in water?
Draw or show an image of a pine tree.
Ask: Where do these trees grow?
Draw a cactus on the board.
Ask: Where does a cactus grow?
Explain that plants can grow in different types of habitat.

Help students draw one of the following, flowers, leaves, roots, seeds, fruits, and vegetables.

Answers to Activities in Unit 3

1. flower, leaf, bud, stem, root
4. a) herb b) shrub c) creeper d) tree
5. a) S b) F c) V d) F e) F f) S g) V h) F i) F

6. Water lily Water
   Cactus Desert
   Pine tree Cold places
   Ponweed Water
   Date palm Desert

Additional activity

Choose the best answer:

a) New plants grow from _____.
   roots flower seeds [seeds]

b) Green plants need sunlight to make their _____.
   food water air [food]

c) A mushroom takes its food from _____.
   living plants human beings dead plants [dead plants]

d) Herbs are _____.
   small plants with short stems
   bushy plants with many leaves and branches
   big plants with hard stems [small plants with short stems]

e) Trees are _____.
   big plants with hard stems
   climbing plants
   small plants with short stems [big plants with hard stems]

f) A pondweed is a plant that grows in _____.
   hot dry places water soil [water]

g) Pine trees have _____.
   broad leaves
   thin needle-like leaves
   flat leaves [thin needle-like leaves]

h) Cactus is a _____.
   water plant desert plant mountain plant [desert plant]

i) Which of the following is not a fruit?
   water melon rose mango [rose]

j) A potato is a _____.
   fruit seed vegetable [vegetable]

Matter

Objectives:

To know that everything on the Earth is made of matter.
To know matter is of many colors and shapes.
To identify the properties of the three kinds of matter
To know that matter can be a solid, liquid, or gas.
To identify the properties of the three kinds of matter.

Teaching strategy:

Ask: Name some living and non-living things in your garden.
Explain that everything on the Earth is made up of matter.

Point to different objects in the classroom.Ask students to name them.
Explain that matter comes in different sizes and shapes.

Ask students to feel some things.
Explain that matter can be smooth or rough, hard or soft, etc.

Place an ice cube in a saucer on your desk.
Show it to the students. After a while, light a candle and allow it to burn for some time.
Ask: What has happened to the ice cube?
What has happened to the candle?

Explain that matter changes.
Explain that matter is a non-living. It's host is what brings it to life.

Show students some solid objects.
Press them, knock them on the table.
Explain that a solid is hard. A solid has a fixed shape.

Show students some liquids.
Touch the liquid. Put some water in a cup and shake the cup. Rub some water between your fingers.
Explain that a liquid is not hard. It has no fixed shape and that it can flow.

Fill some air in a balloon.
Press the balloon. Release the air from the balloon.
Light a candle; blow it out. Show the direction of the smoke.
Explain that a gas is not hard. It has no fixed shape. A gas can move from one place to another.

Answers to Activities in Unit 4

1. a) the Earth b) matter c) shapes, colours d) non-living
2. Bird, flower, tree, starfish, worm, fish, cat
3. a) Y b) N c) N d) N e) Y f) Y g)Y h) N
4. Table Milk Air
   Stone Water Smoke
   Brick Mango juice Steam

Additional activity

Choose the best answer:

a) All things on Earth are made up of _____.
   wood stones matter [matter]
b) Which one of the following is a non-living thing?
   A flower A stone A bird [A stone]

c) A solid _____.
   is hard and has a fixed shape
   has no fixed shape and it can flow
   is not hard and can move from place to place [is hard and has fixed shape]

d) When ice is heated it melts to form a _____.
   liquid gas solid [liquid]

e) Sand is a _ _____.
   solid liquid gas [solid]

f) Milk is a _____.
   solid liquid gas [liquid]

g) When water is cooled it freezes to form _____.
   ice ice-cream jelly [ice]

h) Smoke is a _____.
   solid liquid gas [gas]

i) When a liquid is heated it turns into a _____.
   solid liquid gas [gas]

j) _____ cannot change their shape easily.
   Solids Liquids Gases [Solids]

Heat and light

Objectives:

To know that light helps us see things
To know that the Sun gives heat and light to the Earth
To know the importance of heat
To know that sunlight is made up of seven colours
To know that light can pass through transparent objects
To know that light cannot pass through opaque objects

Teaching strategy:

Ask: Can we see in the dark? What helps us see in the dark?
Explain that light helps us see.

Ask: Where does light on Earth come from?
Explain the importance of sunlight.
Explain that the Sun provides both heat and light.
Ask: If there are other examples of things that give out both heat and light.
Ask: what gives out only heat?
Ask: what gives out only light?
Ask: why do we need light?
Ask: why do we need heat?

Ask: When do you see a rainbow?
Draw a rainbow on the board. Write the names of the seven colours.

Unit 5 Heat and light

Make a colour wheel. Cut a round disc from a card paper. Draw seven parts then colour them with the rainbow colours. Push a pin through the centre and spin it, so that the disk looks white.

Answers to Activities in Unit 5

1. a) N b) N c) Y d) Y
   e) N f) Y g) Y
3. a) violet b) indigo
   c) blue d) green
   e) yellow f) orange
   g) red
4. a) air a) wood
   b) water b) cardboard
   c) glass c) rubber
5. a) candle b) fire
6. a) Sun b) bulb

Additional activity

Choose the best answer:

a) The Sun gives us _____.
   heat and sound
   heat and light
   water and light [heat and light]

b) Which one of the following has its own light?
   A bulb A fire The Sun [The Sun]

c) Sunlight is made up of _____ colours.
   5 6 7 [7]

d) Light cannot pass through _____.
   water glass wood [wood]

e) To keep us warm in winter we need _____.
   light heat sound [heat]

f) Light can pass through _____.
   air wood cardboard [air]

g) _____ helps us to see things in the dark.
   Sound Heat Light [Light]

h) Which one of the following gives off light only?

A torch A fire The Sun [A torch]

i) We do not need heat _____.

to keep warm

to cook our food

to see things in the dark [to see things in the dark]

j) Which one of the following does not give off heat?

A candle A fire A torch [A torch]

Air

Objectives:

To know that air is everywhere
To identify the uses of air
To know that air helps things to burn
To know that wind helps things to move
To know that a strong wind is called a storm

Teaching strategy:

Ask students to move a piece of paper up and down.
Ask: What do you feel? Can you see anything?
Fill a balloon with air.
Ask: Can you see anything inside?
Release air from the balloon.
Ask: What is coming out?
Explain that air is all around us.
Explain that we can feel air but we cannot see it.
Ask: Is it hot or cold today?
Explain that hot and cold air affects the weather.
Put some ice cubes in a glass tumbler. Show students the drops of water that have condensed outside.
Ask: Where has this water come from?

Explain the presence of water vapours in the air and the formation of clouds and rain.

Ask: What do we breathe in? Why do we breathe? Do plants breathe?
Explain the importance of air for respiration.

Ask: Where do insects, birds, and aeroplanes fly?
What do we fill in the balloons and tyres?
Explain the uses of air.

Light a candle then cover it, so that there is no air around the flame.
Ask: Why did the candle go out?
Explain that air helps things burn.

Ask: What is wind? What is a storm?
Explain how wind helps things move.

Teach students to make a paper windmill.
Take a square piece of glazed paper.
Cut along the dotted lines. Fold every alternate corner towards the centre and poke a pin through them. Push the pin through a thin stick. Blow through the flaps of the windmill. It will start turning round. Explain that air helped the windmill move.

Answers to Activities in Unit 6

1. a) yes b) yes
   c) no d) no
   e) yes
2. a) need air b) fly in air
   c)with air d) to burn
   e) wind f) a storm

Additional activity

Choose the best answer:

a) _____ is all around us.
Water Air Sand [Air]

b) Air is made up of __ _____.
water gases solids [gases]

c) When the air is warm we _____.

feel cold feel hot shiver [feel hot]

d) All living things need _____ and water to live.

sun moon air [air]

e) A strong wind is called __ _____.

wind a storm breeze [a storm]

f) A fish breathes air from__ _____.

water air land [water]

g) Drops of water in the air make__ _____.

ice clouds wind [clouds]

h) All living things need air to __ _____.

swim move breathe [breathe]

i) We can feel air when it is __ _____.

flowing moving raining [moving]

j) We fill balloons and tyres with_____.

water air petrol [air]

The Sun and Stars

Objectives:

To know that we can see the Sun in the daytime
To know that the Sun is very far from the Earth
To know that the Sun is a big ball of hot, burning gases
To know that the Sun gives heat and light to the Earth
To know that stars are big balls of burning gases
To know that the Sun is a star

Teaching strategy:

Draw the Sun on the board.
Explain that the Sun gives of heat and light.
Ask: When can we see the Sun?
Explain that the Earth gets heat and light from the Sun.

Draw a picture of the night sky.
Ask: When do we see stars? What is a star?
Explain that stars are big balls of burning gases.
Ask: Why do stars seem small?
Explain that stars are very far away.
Explain that the Sun is a star.

Unit 7 The Sun and Stars

Ask: Why can we feel the heat and see the light of the Sun?
Explain that the Sun is the nearest star to the Earth.
Ask students to draw the sky in the daytime and at night.

Answers to Activities in Unit 7

1. a) Sun b) far
   c) gases d) light
   e) stars
3. a) no b) no
   c) yes d) no
   e) yes

The Moon

Objectives:

To know what the Moon is
To know that the Moon is close to the Earth
To know that the Moon does not have its own light
To know that the Moon shines because of sunlight
To know that the Moon moves round the Earth once evey to 28 days.
To know that the changing shapes of the Moon are due to it's movement round the Earth.
To know that there is no life on the Moon
To know that things on the Moon have no weight

Teaching strategy:

Draw the night-time sky with the Moon and stars.
Ask: When do we see the Moon?
Explain that the Moon is close to the Earth.

Ask: Does moonlight feel hot?
Explain that the Moon does not have its own light. It shines because of sunlight falling on it.

Ask: What is the shape of the new Moon?
When do we see the full Moon?
Explain that the Moon moves around the Earth in 28 days and as the Moon moves we can see the shapes of the Moon.
Draw the shapes of the Moon on the board.

Ask: Does anyone live on the Moon?
Explain that astronauts have been on the Moon. They know that nothing can live on the Moon because there is no air.

Unit 8 Moon

Ask: Have you seen pictures of astronauts on the Moon?
Ask: What do they seem to be doing?
Show students pictures of astronauts. Explain that they have to wear special suits because there is no air or gravity on the Moon.

Answers to Activities in Unit 8

1. a) yes b) no
   c) no d) no
   e) yes
3. a) water b) living
   c) Sun d) Earth e) night

Additional activity

Choose the best answer:

a) The Sun is a big ball of __ _____.
rubber air hot gases [hot gases]

b) We can see the Sun__ _____.
at night in the daytime on a cloudy day [in the day time]

c) We can see stars in the sky__ _____.
at night in the day time in the afternoon [at night]

d) The Sun is _ _____.
a moon a star a planet [a star]

e) The Moon is _____ the Earth.
bigger than smaller than equal in size to [smaller than]

f) The Moon _____ light of its own.
has does not have sometimes has [does not have]

g) We can see the Moon when the _____ throws light on it.
Earth Sun star [Sun]

h) We can see the shapes of the Moon at different times of the___ _____.
day night month [month]

i) How far is the Moon from the Earth?
Very far away Very close At the same distance as the Sun.
[Very close]

j) The Earth gets heat and light from the___ _____.
Sun and the Moon stars Sun [Sun]

The Earth

Objectives:

To know that the Earth is a planet
To know that the Earth gets heat and light from the Sun
To know that the Earth has land, air, and water
To know that 3/4 part of the Earth is covered with water
To know that the Earth turns round the sun once every day
To know that the Sun rises in the east and sets in the west
To know that at midday the Sun is over our heads

Teaching strategy:

Show the students a globe. Explain that the Earth is round.
Show the continents and oceans.
Explain that 3/4 part of the Earth is covered with water.
Ask: What is land made up of ?
Explain the types of rocks and the formation of soil.
Ask: Where do earthworms live? Where do plant roots grow?
Explain that living things live in the soil.
Ask: When do you wake up? When do birds and animals wake up?
How do we know it is morning?
Explain the formation of day and night with the help of a globe and a lamp representing the Earth and Sun respectively.
Show that the Earth turns on its axis once in 24 hours.
Explain that it is not the Sun rising or setting but that it appears to be so because the Earth is turning.
Explain that at midday the sun is over our heads.

Unit 9 The Earth

Answers to Activities in Unit 9

1. a) big b) Sun
   c) planet d) Sun
   e) east
3. a) morning b) evening
   c) midday d) East
   e) West

Additional activity

Choose the best answer:

a) The Earth is like a big_____.
ball ship plate [ball]

b) The Earth is a _____.
star planet moon [planet]

c) The Earth gets heat and light from the_____.
Moon stars Sun [Sun]

d) The Earth goes round the _____ in an oval path.
Moon stars Sun [Sun]

e) The Sun rises in the __ _____.
North South East West [East]

f) The Sun sets in the__ _____.
North South East West [West]

g) As the Earth spins, the side that faces the Sun has_____.
day night evening [day]

h) The Sun is a _____.
star moon planet [star]

i) At midday the Sun is_____.
on our left over our heads in front of us [over our heads]

j) The Earth has_____.
land, water, and air only land and water
only land and air [land, water, and air]

Sample lesson plan

Unit 1 : Living things

Topic Science	Time	knowledge objectives	 skills	Plan activity time	Resource material
Defining science	40 min	To make children a ware of what science means	To understand that science is a way of finding things out	Previous knowledgw: 5 min Discussion: 20 min A tivity: 5 min Q/ Ans: 10 min	`science` placard cuttings and charts of pictures of living and non-living things
Differences between living and non - living things.	40 min	To know the the meaning of observation	To defferntiate between things by observation	Previous knowledgw: 5 min Discussion: 20 min A tivity: 5 min Q/ Ans: 10 min	worksheets for Q.1 and Q,4 (a), (b), (c).
Assessment tasks		Homework		Teacher' evaluation	
Ex. 1 and 4 to be done in the class		Q.2,and 3		Students can explain the meaning of the word science, and are able to differentiate between living and non-living things by observation.	

Assessment

1. Answer the following questions:

a) What is science?

_____

b) What are insects?

_____

c) What are wild animals? How do they move?

_____

d) What are useful plants? _____

e) What are the kinds of matter?

_____

2. Fill in the blanks:

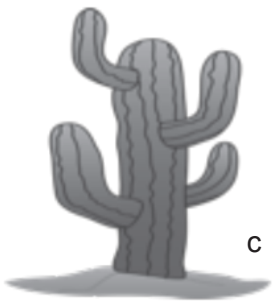
a) An elephant is _____ than a mouse. (bigger)
b) A whale is a _____. (water animal)
c) Green plants can make their own _____. (food)
d) A gas can_____ from place to place. (move)
e) Light can pass through water, air and _____. (glass)
f) Drops of _____ in the air make clouds. (water)
g) Stars are big balls of _____. (hot gases)
h) The Moon has no _____ or water. (air)
i) The Earth goes around the _____. (Sun)

Assessment

3. Name the following:

a _____

b _____



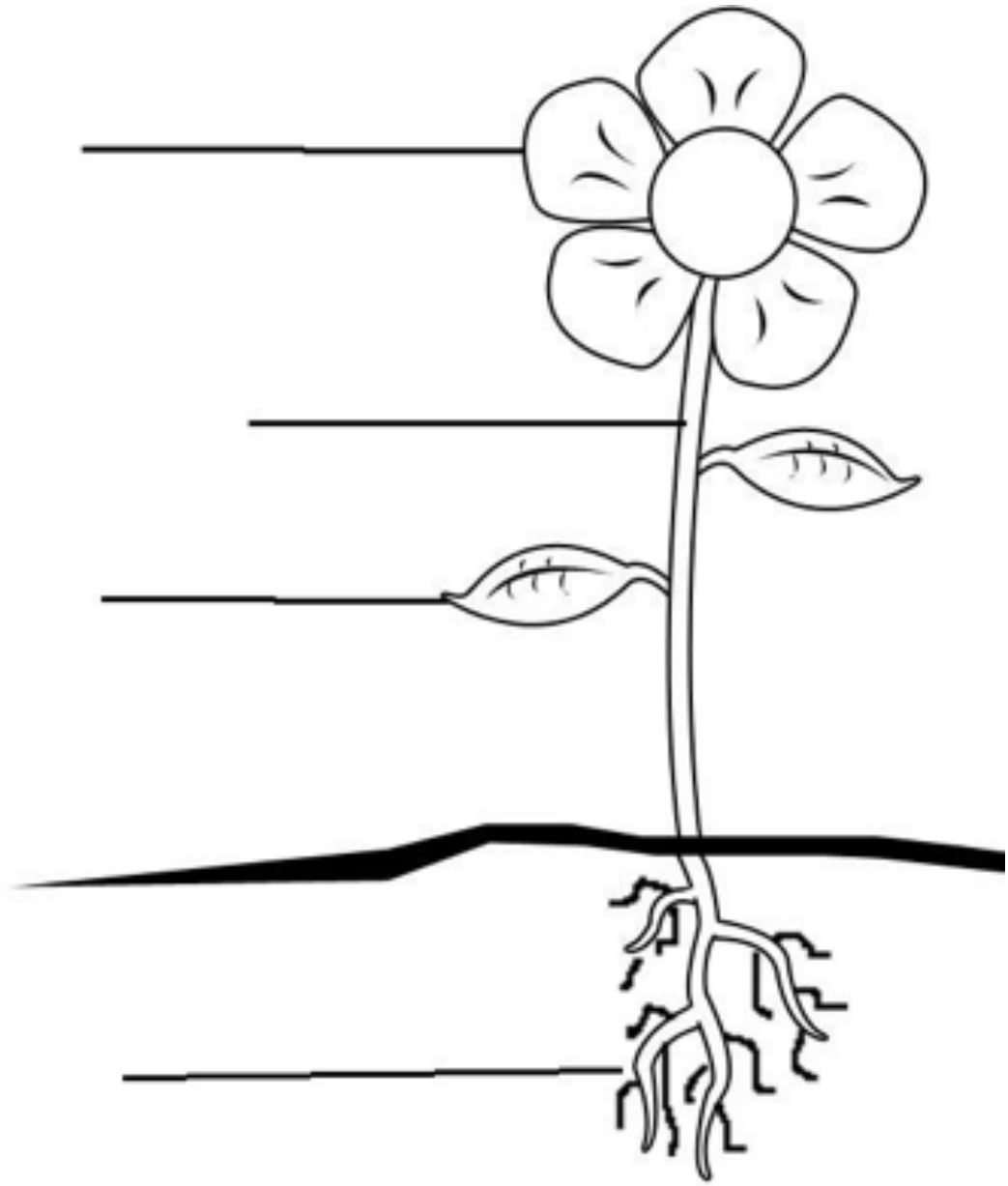
c _____

d _____

e _____

f _____

4. Label the following:



Assessment Answers

1. a) Science is the study of the world using our senses.
   b) Insects are very small animals.
   c) Wild animals live in the forest. They walk and run. Some of them climb.
   d) Useful plants are plants that give us fruits or flowers or wood.
   e) Matter can be solid, liquid or gas.

3. a) Star fish
   b) Water melon
   c) Cactus
   d) Sheep
   e) New moon
   f) Full moon

4. Flower, stem, leaf, root

Test Answers:

2. a) stone b) football c) horse d) tortoise e) jelly

3. a) Sea horse b) Duck c) Bee

4. a) small b) insect c) a cart d) forest

5. All of them

6. a) T b) F c) T

7. a) liquid b) solid c) gas

8. Table Milk Air
   Stone Water Smoke
   Brick Mango juice Steam

9. a) The Sun b) A Candle c) Fire

10. All of them.

11. a) air b) clouds c) storm

12. a) at night b) in the daytime c) from the Sun d) bright light

13. a) New Moon b) Half Moon c) Full Moon

14. a) We can see the moon at night
    b) The Moon is close to the Earth
    c) The Moon has no air
    d) The Moon has no water
    e) No one lives on the Moon

15. a) F b) F c) T d) F

Notes

Notes