

مشروع بناء برامج تعويضية

لصعوبات تعلم المواد الدراسية للاجئين السوريين

لبنان - الأردن - تركيا (الداخل السوري)

1

# الدليل المرجعي

## لصعوبات تعلم العلوم

للحد من الفاقد التعليمي لدى  
اللاجئين السوريين

1

الدليل المرجعي  
لصعوبات تعلم العلوم

الصف الأول الابتدائي

الصف الأول الابتدائي



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معلمة العلوم في مدرسة كويت الخير

أ/ نسرين رشيد قاسم

منسقة مادة العلوم في مدارس الكويت الخيرية

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منسق مادة علوم الحياة ومدرس في مدارس الإيمان

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معلم مادة العلوم في مدارس ومعاهد، معد مواد وبرامج تعليمية

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## فريق الترجمة

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معلمة العلوم في مدارس الكويت الخيرية

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معلمة العلوم في مدارس الكويت الخيرية

أ/ سحر عواد

معلمة العلوم في مدارس الكويت الخيرية

أ/ سماح ملص

معلمة العلوم في مدارس الكويت الخيرية

أ/ مروان زريقة

معلم العلوم في مدارس الكويت الخيرية

## تدقيق ومراجعة

أ/ نسرين قاسم

منسقة العلوم في مدارس الكويت الخيرية



## Slide 1

### KWL Table

#### Subject: The Dangers around me

What I learned	What I want to know	What I know
(L)	(W)	(K)



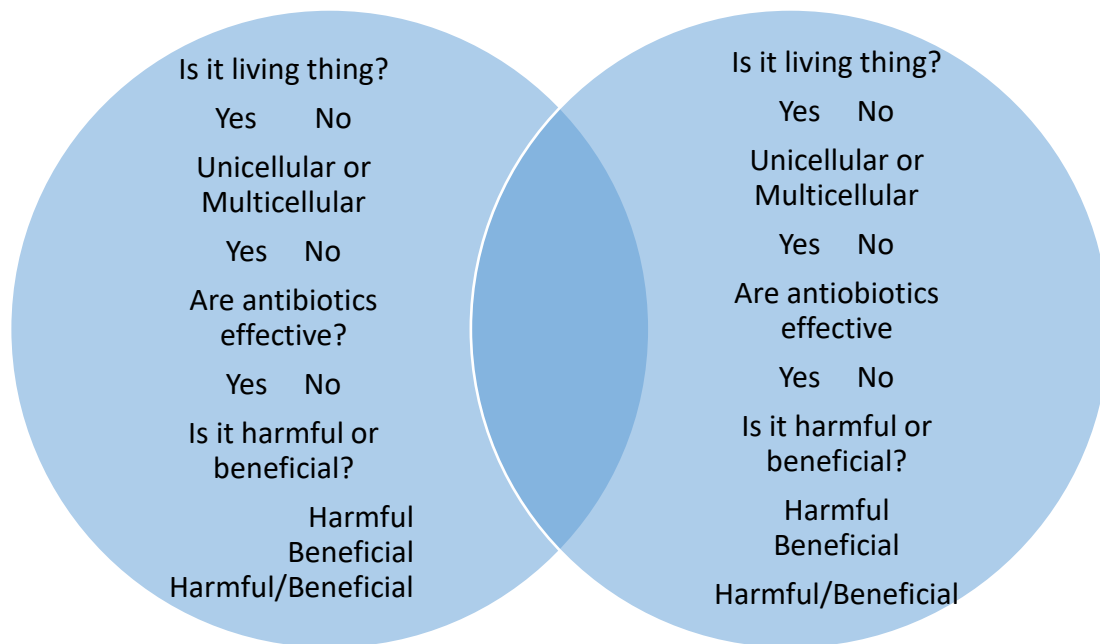
## Worksheet 2

Listen to your teacher while reading the following questions then use your information about bacteria and viruses to circle the true words:

Bacteria



Similarities

Viruses



## Worksheet 3

Put a **tick ✓** for the suitable one to each picture

Symptoms	Cold	Pneumonia
Runny Nose 		
High fever 		
Respirator Problems 		
Coughing 		
Sore throat 		
Weakness 		
Chest pain 		
Diarrhea 		
Nausea 		
Trembling 		




Indicate which of the following statement is true and which one is false:

	Sentence	True	False
1	Bacteria and viruses are the same		
2	All diseases are caused by germs		
3	Cold weather is the cause of cold		
4	Pneumonia and cold are the same		
5	Ice should be applied on burn to soothe		
6	We don't get cold in summer		
7	To stop nose bleeding, you have to tilt head back		
8	When a person is bitten by a snake, the poison must be sucked to get rid of		
9	Water is suitable for extinguishing types of fire		
10	Cold and flu are bacterial diseases		
11	All bacteria and viruses are harmful		
12	Bacteria are only found in contaminated food		
13	When we get the influenza vaccine, we do not get the virus as we are in contact with an infected person		
14	Bacteria are nonliving things		
15	Drinking hot drinks prevents influenza		

## Worksheet 4

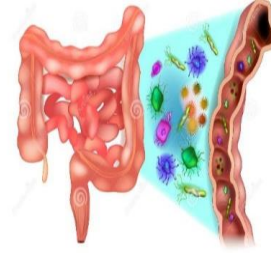
Put X to express the type of behavior.

Picture	Right behavior	Wrong behavior
 <p>Raising the head when the nose bleed</p>		
 <p>Putting toothpaste to treat burns</p>		
 <p>Put ice on the burn to calm it down</p>		
 <p>Using water to put out the fire</p>		
 <p>Suck live poison to get rid of it</p>		



## Worksheet (5)

Cut the pictures and paste them in the right place

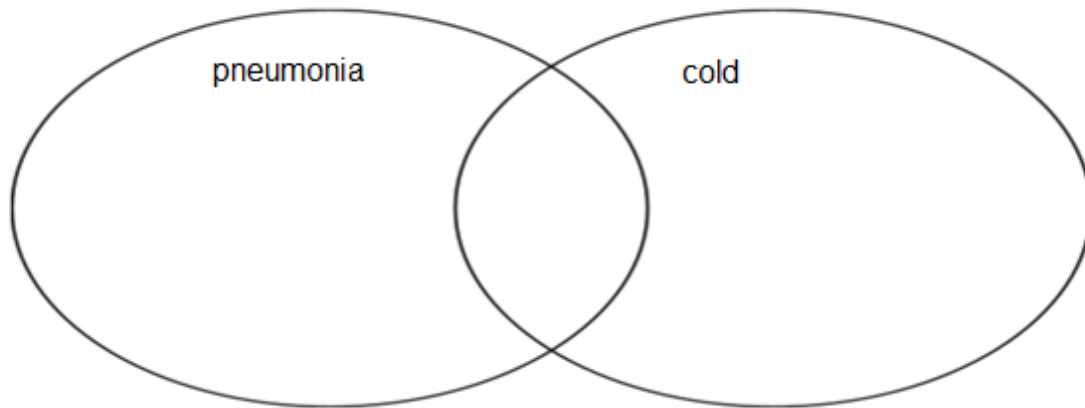
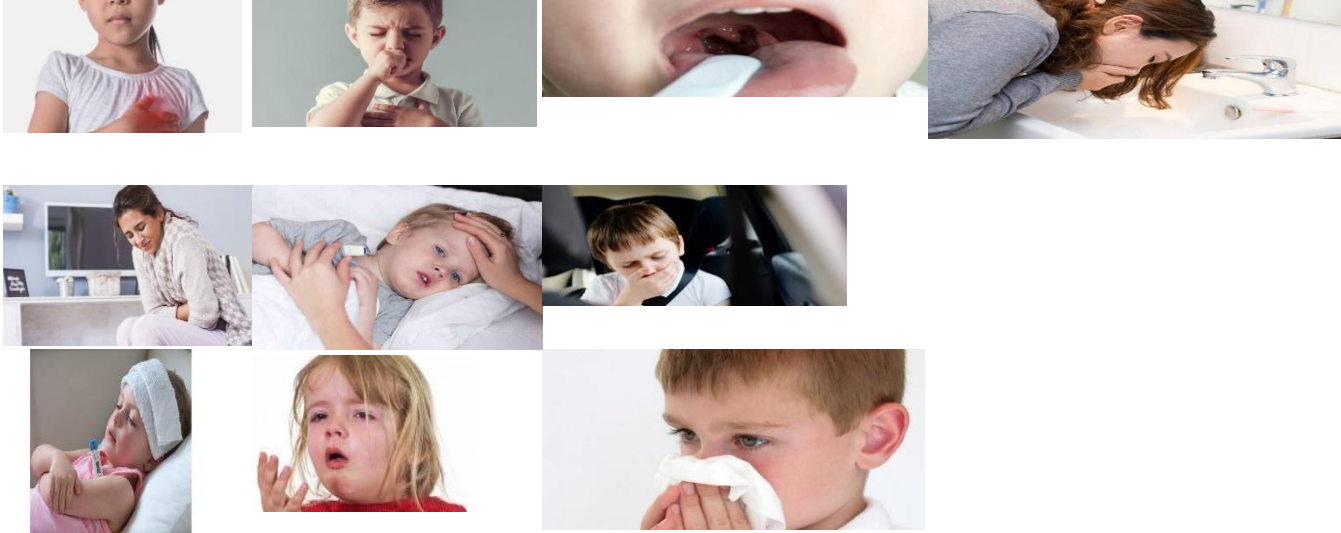


Harmful bacteria	Beneficial bacteria



## Worksheet 6

Complete the **Venn** diagram (with symptoms of pneumonia and cold) by using the below pictures



## Worksheet 7

Cut and paste the pictures to design a poster for methods to prevent infectious diseases.



**Methods of preventing infectious diseases**

## Worksheet (8)

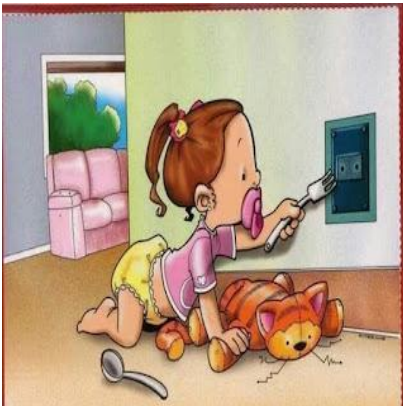
Describe what will happen to each child by using the words in boxes.

Injury

Fall and slip

Electric Shock

Burns





## Worksheet (9)

Indicate by true or false:

M	Sentence	True	False
1	Ahmad uses matches to ignite the gas cooker		
2	Nada puts an iron nail into an electric socket.		
3	Sohaila uses a knife to cut vegetables		
4	Iman relied on her mother to help of getting the toy that is over the cupboard		
5	Ayman slides over the staircase to descend quickly		
6	Ahmad uses a chair to stand by the gas		
7	Mazen always plays with dogs and cats		
8	Mahmoud refuses to touch a syringe on the table		
9	Ahmad gets stuck in a truck to get home quickly		
10	Nour prefers playing in the garden instead of the balcony		

## Worksheet (10)

Choose the best way to deal with each case

1- The best way to deal with burns is

Toothpaste

Antibiotic cream

Ice



2- It is preferable when extinguishing electrical fires, to disconnect the current and use ..... to extinguish the fire

Flour

Water

Blanket



3- Ahmad slipped while playing at home and broke his leg, we can help Ahmed with

Taking to the doctor

Cold water

Hot water



4 - Nada was bitten by a snake while she was playing in the garden, she can be healed by

Sucking poison in mouth

Putting ice on injury

Antitoxin serum



5 - Nader had a nose-bleeding after falling from the stairs. To stop the bleeding, Nader must stand up

Put swab inside nose

Till head forward

Till head backward





## Worksheet (11)

### Preventing Home Dangers

Cut and paste the cards in the right place in the table.

Take  
precautions  
when  
walking on  
wet ground

Ask your mother  
to put the plug  
and deal with  
electricity for you

Stay away  
from heaters  
and irons, and  
do not play  
with them

Stay away from  
matches and  
lighting up in  
the stove

Wear shoes  
when playing  
in the garden  
outside

Avoid  
handling  
sharp  
instruments

Avoid playing  
with  
electricity  
with wet  
hands

Do not use  
sharp  
instruments  
with electricity

Bite prevention	Wounds prevention	Shock electricity prevention	Burn prevention



## Slide 1

# Learning Table

**Topic:**  
**Animals**



<b>K</b> <b>What do you know?</b>	<b>W</b> <b>What do you want to know?</b>	<b>L</b> <b>What did you Learn?</b>
<div data-bbox="321 1451 456 1604"></div> <div data-bbox="305 1625 456 1824"></div>	<div data-bbox="727 1472 878 1598"></div> <div data-bbox="727 1625 878 1814"></div>	<div data-bbox="1182 1478 1252 1604"></div> <div data-bbox="1166 1625 1284 1824"></div>

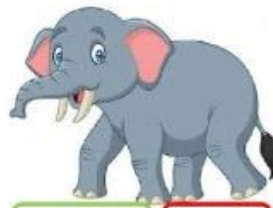




## Worksheet 1

### Domestic or Wild animal

Circle the correct answer:



domestic

wild



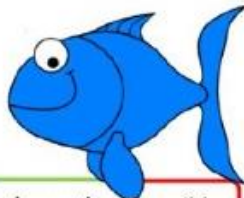
domestic

wild



domestic

wild



domestic

wild



domestic

wild



domestic

wild



domestic

wild



domestic

wild



domestic

wild



domestic

wild



domestic

wild



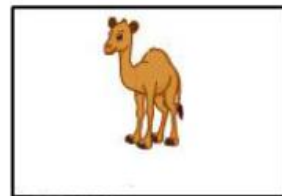
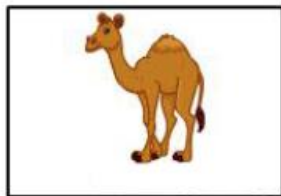
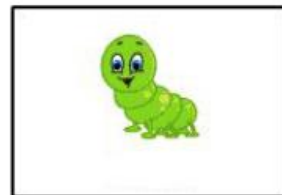
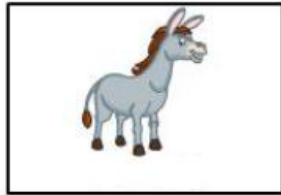
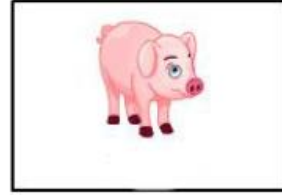
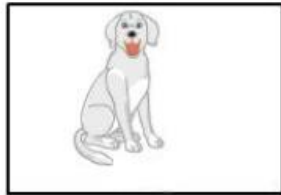
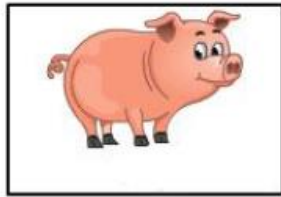
domestic

wild

## Worksheet 2

### Baby animals

Match each animal with its mother:





## Slide 2

### Diagnosis Assessment

Indicate which statement is true and which is false:

No	Phrase	True	False
1	Only living things that breathe have a nose.		
2	A plant is not a living thing because it does not breathe.		
3	A plant is not a living thing because it does not move		
4	A plant is not a living thing because it does not eat.		
5	Cultivated plants are vegetables and trees, while herbs and cacti are not plants.		
6	Lion, tigers, and monkeys are animals that live in the zoo.		
7	Animals need a habitat only to live and sleep, not to obtain the food (matter and energy) needed for growth.		
8	Only birds lay eggs.		
9	All baby animals look like their parents.		
10	Female animals are responsible for caring for the young.		
11	Elephants are carnivores		
12	Young whales eat fish and plankton.		



## Worksheet 3

### Living Thing

**Circle and Color** the living thing below:



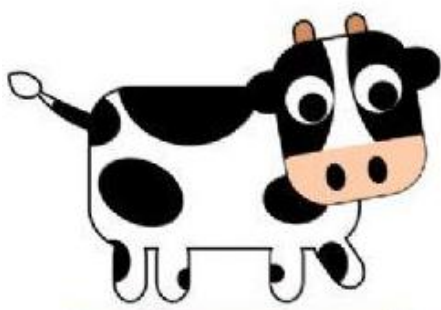


## Worksheet 4

### Living Thing

Complete the diagram with the appropriate words:

Reproduce	Feed	Move	Grow
Pen-Book	Vital	Lion-Palm	Breathe



#### Characteristics

.....  
.....  
.....

#### Definition

.....  
.....  
.....

### Living Thing

#### Non-Examples

.....  
.....  
.....

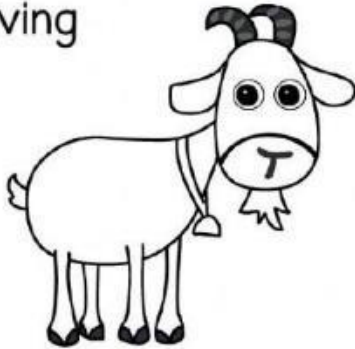

#### Examples

.....  
.....  
.....

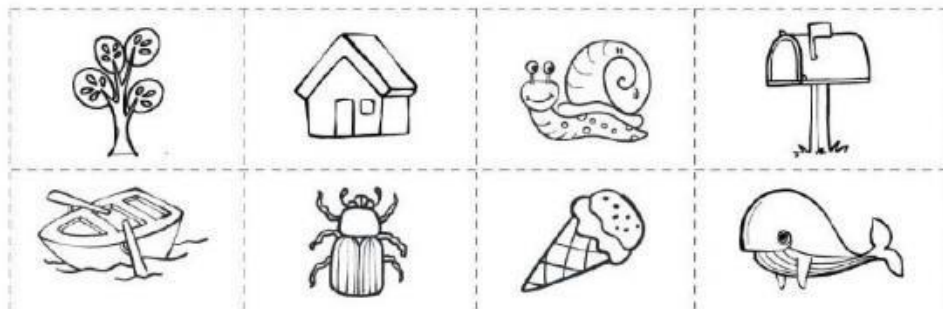
## Worksheet 5

### Living Thing or Nonliving Thing

Color each card and then place it in its appropriate place in the table:

Living	Non-Living
	

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## Worksheet 6

### Animal or Plant

Write the word "animal" or the word "plant" under each picture:



.....



.....



.....



.....



.....



.....



.....



.....



.....



.....



.....



.....

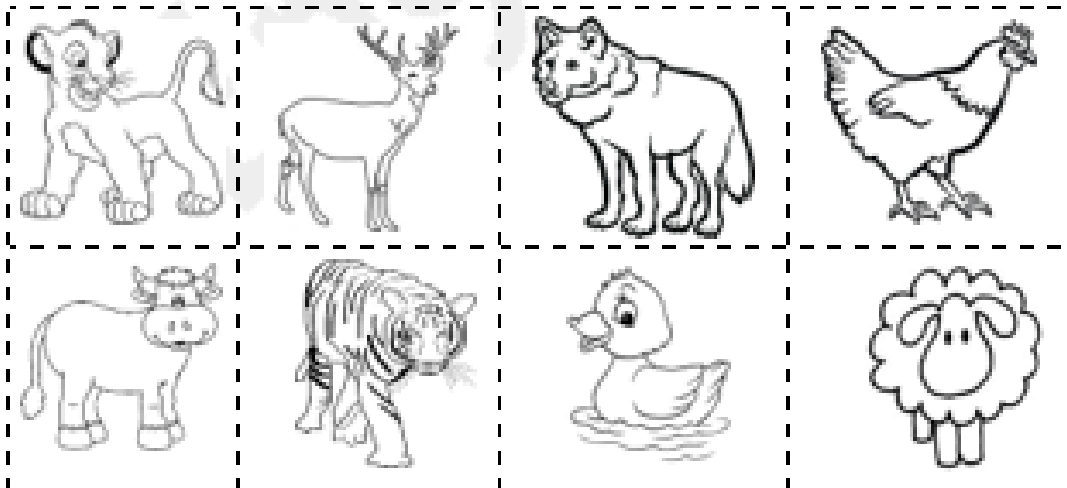
## Worksheet 7

### Domestic or Wild animal

Cut and color each animal card, then indicate where it lives (Domestic / Farm- Wild)


FARM

WILD





### Slide 3

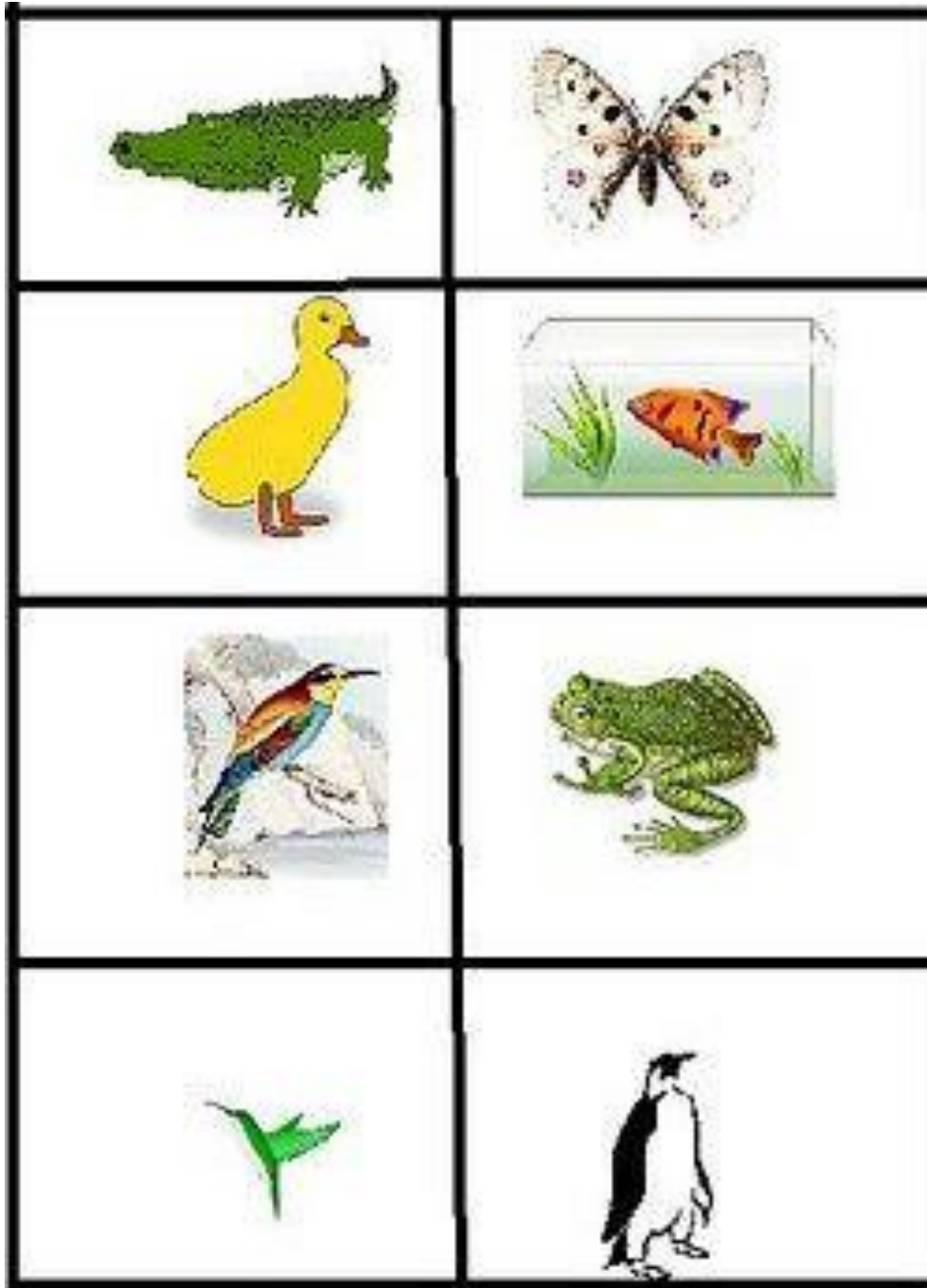
## Benefits of Domestic Animals





## Slide 4

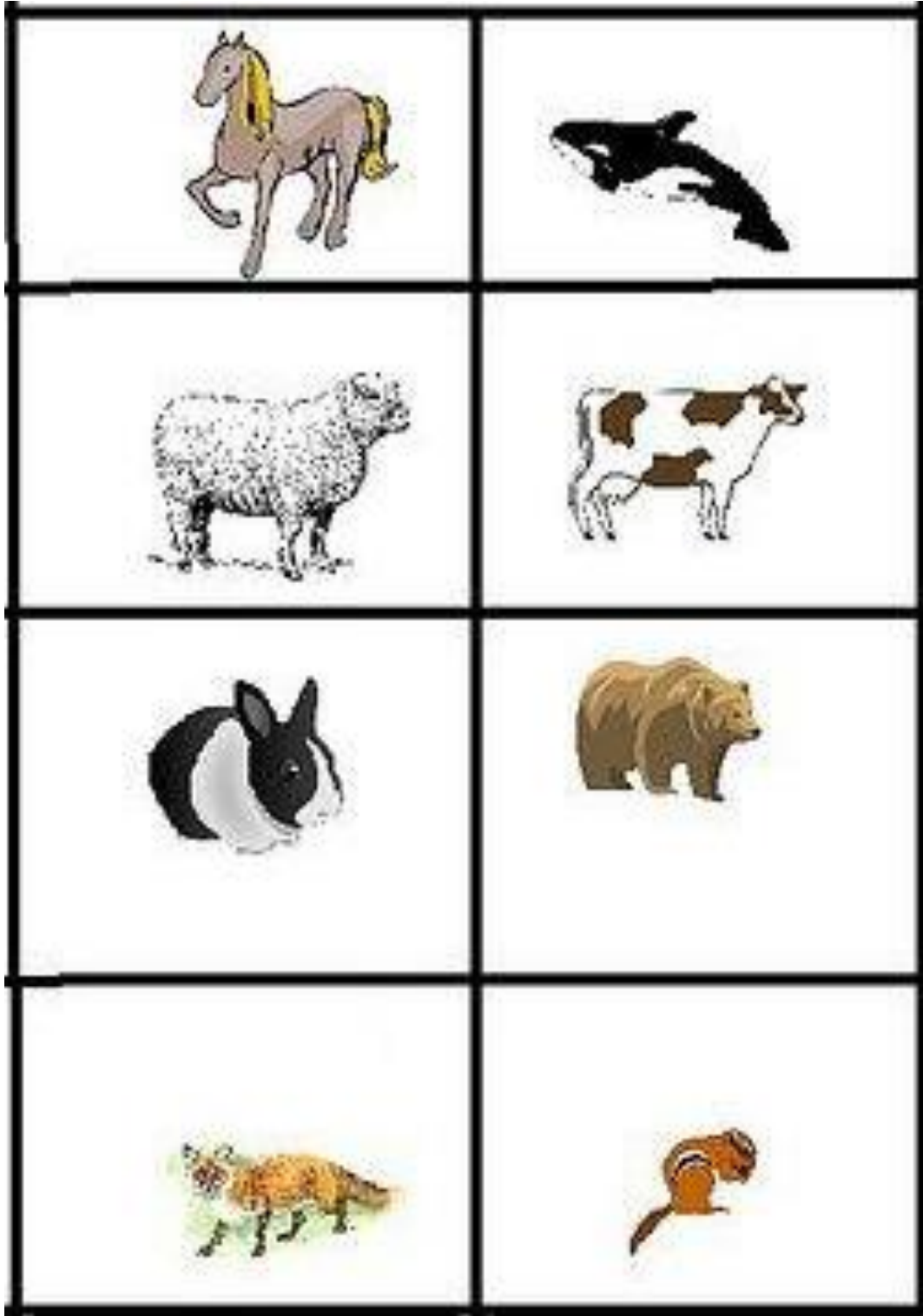
### Reproduction of Animals 1





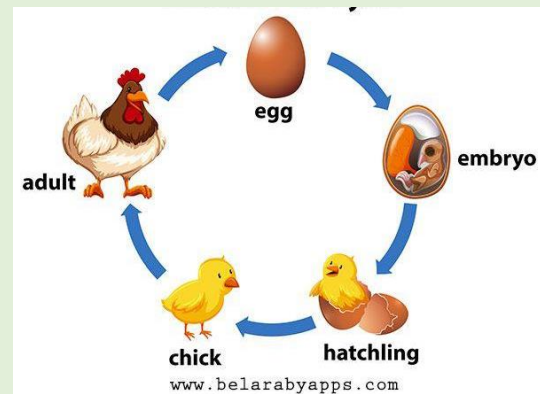
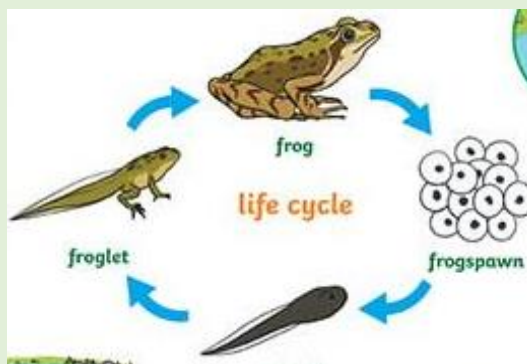
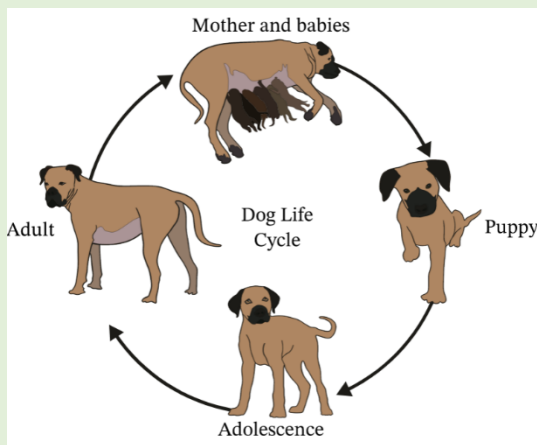
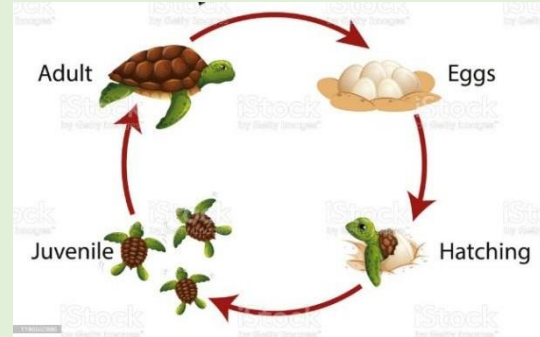
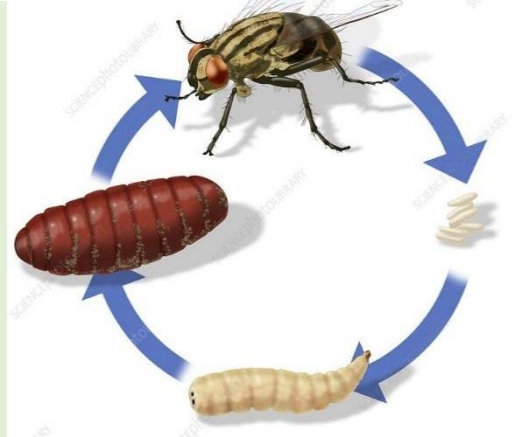
## Slide 5

### Reproduction of animals 2



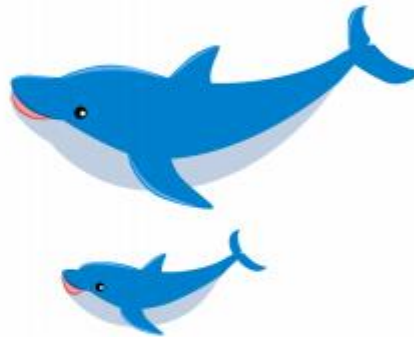
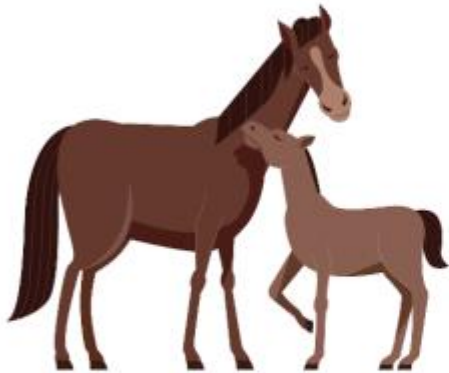
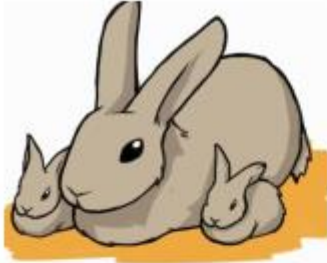


## Baby Animals



Slide 7

## Caring of Animals for their Young



## Assessment 1

Othman puts a small guard dog on his farm. Circle the things that the dog needs to grow:





[illegible]



## Worksheet (2)

Cut and paste the pictures in the correct place in the table below:

Living thing	Non-living thing
   	     



## Worksheet (3)

Indicate the True and False Statements:

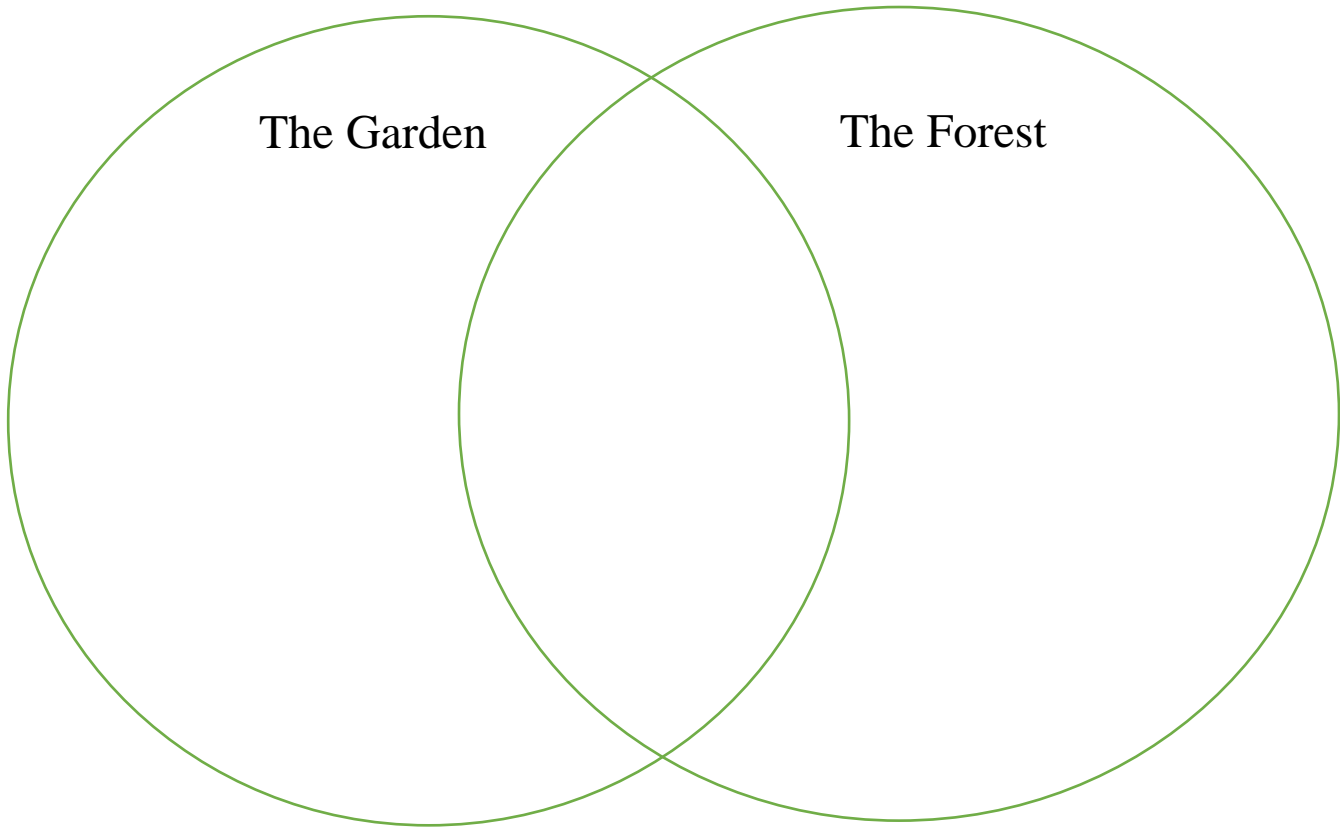
No	Statements	True	False
1	The garden consists of living things only		
2	Water is one living thing in the garden.		
3	The garden is formed without the action of human		
4	Plants need only water to live.		
5	The type of garden is different from one place to another.		
6	The garden may contain some animals.		
7	The plant is the most important one in the garden.		





## Slide (1)

Complete the Venn Diagram to compare between the garden and the forest:





## Worksheet (4)

Match the plant with its needs to grow:

Apple

Sun light

Water

Egg

Juice

Soil







Milk

Air



## Worksheet (5)

Classify the following as season plant or non-season plant (Evergreen):

Season Plant	Evergreen Plant (perennial)
.....	.....
.....	.....
.....	.....
.....	.....
<div>  <p>cucumber</p> </div> <div>  <p>Lettuce</p> </div> <div>  <p>Lemon</p> </div> <div>  <p>Olive</p> </div> <div>  <p>Orange</p> </div> <div>  <p>Apple</p> </div>	



## Worksheet (6)

Draw example for the garden plants and one of the forest plants



Garden Plants



Forest plants



## Slide 1

### KWL

<b>K</b> What do you know?	<b>W</b> What do you want to know?	<b>L</b> What did you learn?





## Worksheet 2



### بطاقة ملاحظة سلوك الطالب

الرقم	العبارات	مطلقاً	أحياناً	دائماً
1	يتشتت انتباهه بسهولة.			
2	ينسى واجباته اليومية وأغراضه.			
3	يشعر بالإحباط بسرعة.			
4	تقديره لذاته ضعيف.			
5	يحط من قدر نفسه.			
6	غير منظم .			
7	ينسى ما يتعلمه بسرعة.			
8	مقدرته على إدراك ترتيب / تسلسل الأشياء ضعيفة.			
9	يجد صعوبة في اتباع سلسلة من التعليمات .			
10	أوراقه غير نظيفة أثناء الكتابة .			
11	يتأخر في الاستجابة اللفظية.			
12	غير قادر على توقع نتائج سلوكه.			
13	لا يستطيع الاستمرار لإنهاء المهام المطلوب منه إنجازها.			
14	غير قادر على الاحتفاظ بالمعلومات (ينسى بسرعة).			



## Worksheet 3

Cut and Paste the living and non-living things from below documents in their proper place.

Non-Living things	Living things





## Slide 4



Indicate whether the following statements are (True) or (False)

No	Statement	True	False
1	Ecosystems are large.		
2	The aquatic environment cannot constitute an ecosystem		
3	There are clothes made from some types of plants.		
4	There are no side effects of using medicinal herbs.		
5	Ecosystems are similar.		
6	An ecosystem is made up of living things only.		
7	We use plants and animals to get food only.		
8	Humans do not affect the components of the ecosystem.		
9	Drugs can be made from animals.		
10	Some animals are useless.		





## Slide 5

Indicate the names of living things and non-living things and their number from an area you have chosen.

Living things

Approximate  
number

Non-Living  
things

Approximate  
number





## Worksheet (6)

Write the name of the appropriate ecosystem.



Grassland

Lake

Forest

Desert

Ocean

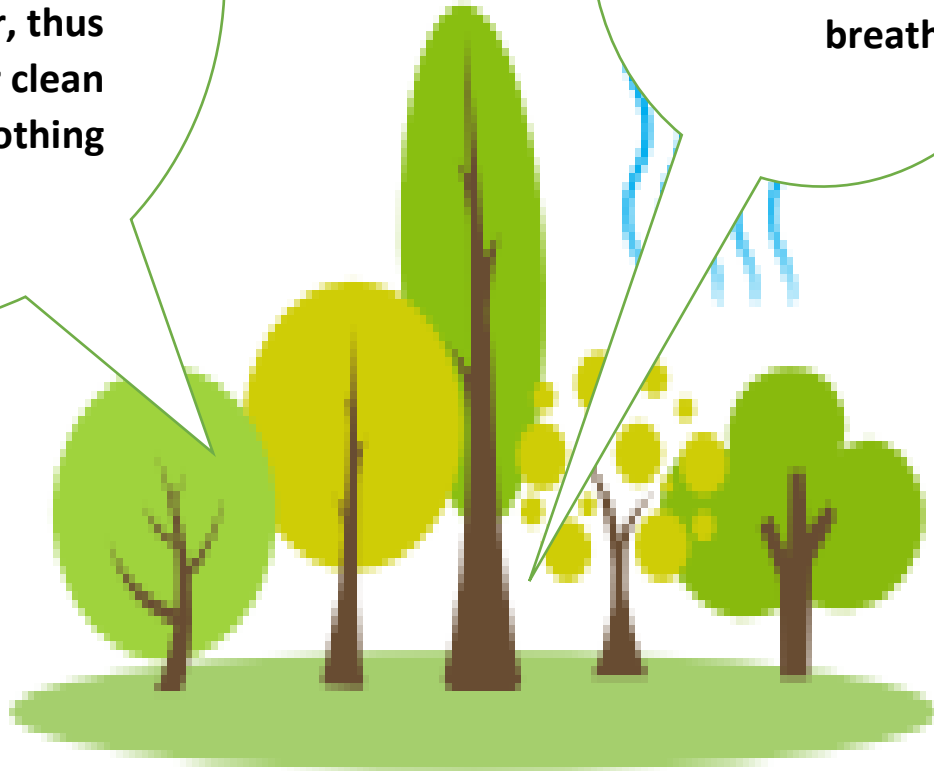


## Worksheet 7

### Oxygen

I am a strong tree, I absorb the carbon dioxide that is emitted from cars and factory chimneys in the air, thus keeping the air clean and soothing

I also release the oxygen needed for living things to breathe



## Worksheet 8

Describe each picture:



1-----



2-----



3-----



4-----



5-----



6-----



## Worksheet 9

Color the picture, then deduce the importance of the apple tree to living things.



## Worksheet 10



Draw a:

- Circle around the animals that we use their eggs.
- Square around the animals that we use their meat.
- Triangle around the animals that we use their skin.
- Flower shape around the animals that we use for transport.
- Heart shape around the animals used to guard.

Note, that an animal can have more than one benefit. You can put more than one shape around the name of the animal

**Deer**

**Chicken**

**Duck**

**Goat**

**Ox**

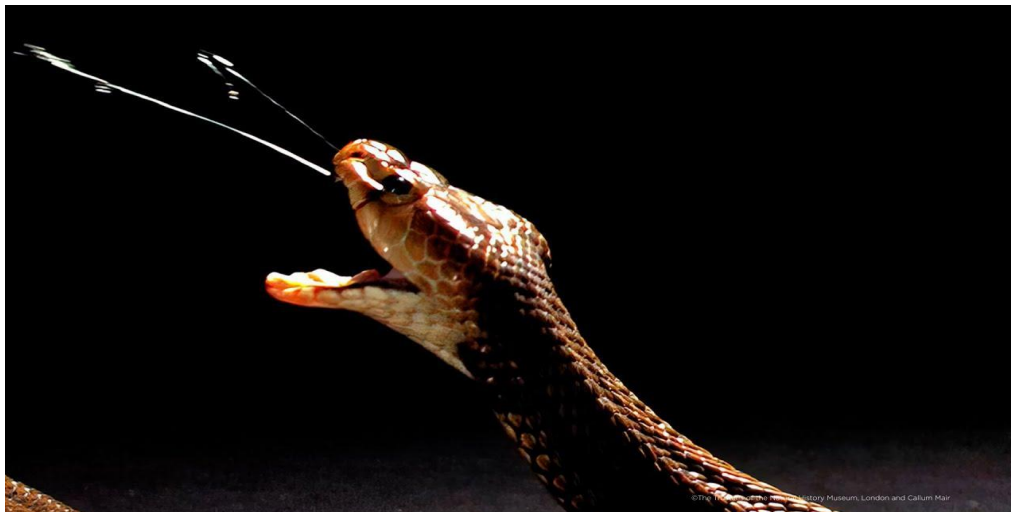
**Cat**

**Dog**



## Slide 11

Look at the picture that represents a poisonous snake that spews its poison, and this poison can blind a person if it touches his eyes.



- Can snake poison be used in the manufacture of drugs. Why?

.....

.....

- Suggest the names of animals that can be used to make drugs.

.....

.....

- Do you dream of becoming a pharmacist working on the preparation of medicinal drugs in the future? Why?

.....

.....



## Worksheet 12

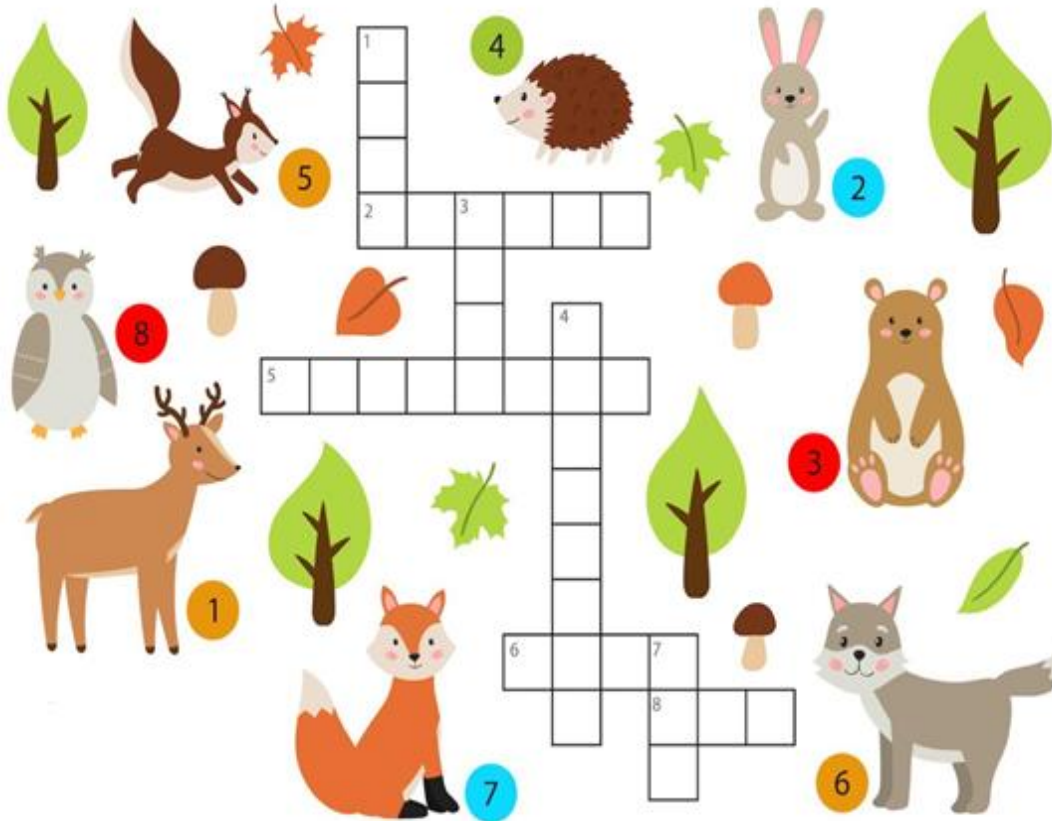
Help the fox to get to the rest of his friends in the forest:





## Slide 13

Fill the blanks in the following diagram with your group:



## Slide 1



**KWL-Table**







<b>K</b> What do you know?	<b>W</b> What do you want to know?	<b>L</b> What did you learn?

The KWL-Table is a learning tool with three columns. The top row contains the headers: 'K What do you know?', 'W What do you want to know?', and 'L What did you learn?'. The bottom row contains three empty boxes for student input. The table is decorated with a colorful chain of paper links around the top, bottom, and sides. Four oval images of animals are placed around the table: a colorful parrot in the top-left, a goat in the top-right, a koala in the bottom-left, and a turtle in the bottom-right.

## Slide 2

### Diagnosis Assessment

Choose the correct answer, then explain your choice

N0	Question	Explain
1	<p>To which group of organisms do the following animals belong:</p>  <p>1. Mammals                      2. Birds 3. Reptiles                      4. Amphibians</p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
2	<p>Which of the following animals is an amphibian?</p> <p>1-                       2-  3-                       4- </p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
3	<p>Which of the following organisms is not covered with hair (there may be more than one)?</p> <p>1. Frog                      2. Cow 3. Eagle                      4. Monkey</p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
4	<p>1- What is the name of the group of animals whose body is covered with scales?</p> <p>1- Fishes                      2- Reptiles 3- Mammals                      4- Amphibians</p>	<p>.....</p> <p>.....</p> <p>.....</p>
5	<p>The following organisms are classified into a group:</p>  <p>1- Fishes                      2- Reptiles 3- Mammals                      4- Amphibians</p>	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>

## Slide 3



Indicate by true or false.



No	Statement	yes	NO
1	The number of herbivores such as cows is increasing because people raise them.		
2	The number of predators is equal to the number of herbivores.		
3	There is no relationship between the number of prey and the animals they prey on.		
4	A food web is a simple food chain.		
5	Food webs are complex food chains.		
6	The higher living things in the food web, as Like tigers, eat everything inferior to them in the food web...		
7	The top of the food chain gets the most energy because it contains the largest number of living things.		
8	The food chain begins with plants.		
9	There is a relation between the number of mice and the number of cats somewhere.		
10	Energy travels from the bottom to the top in the food chain.		



Do you find it difficult to know the role of plants and animals played in an ecosystem? If your answer is yes, state why.

.....

.....

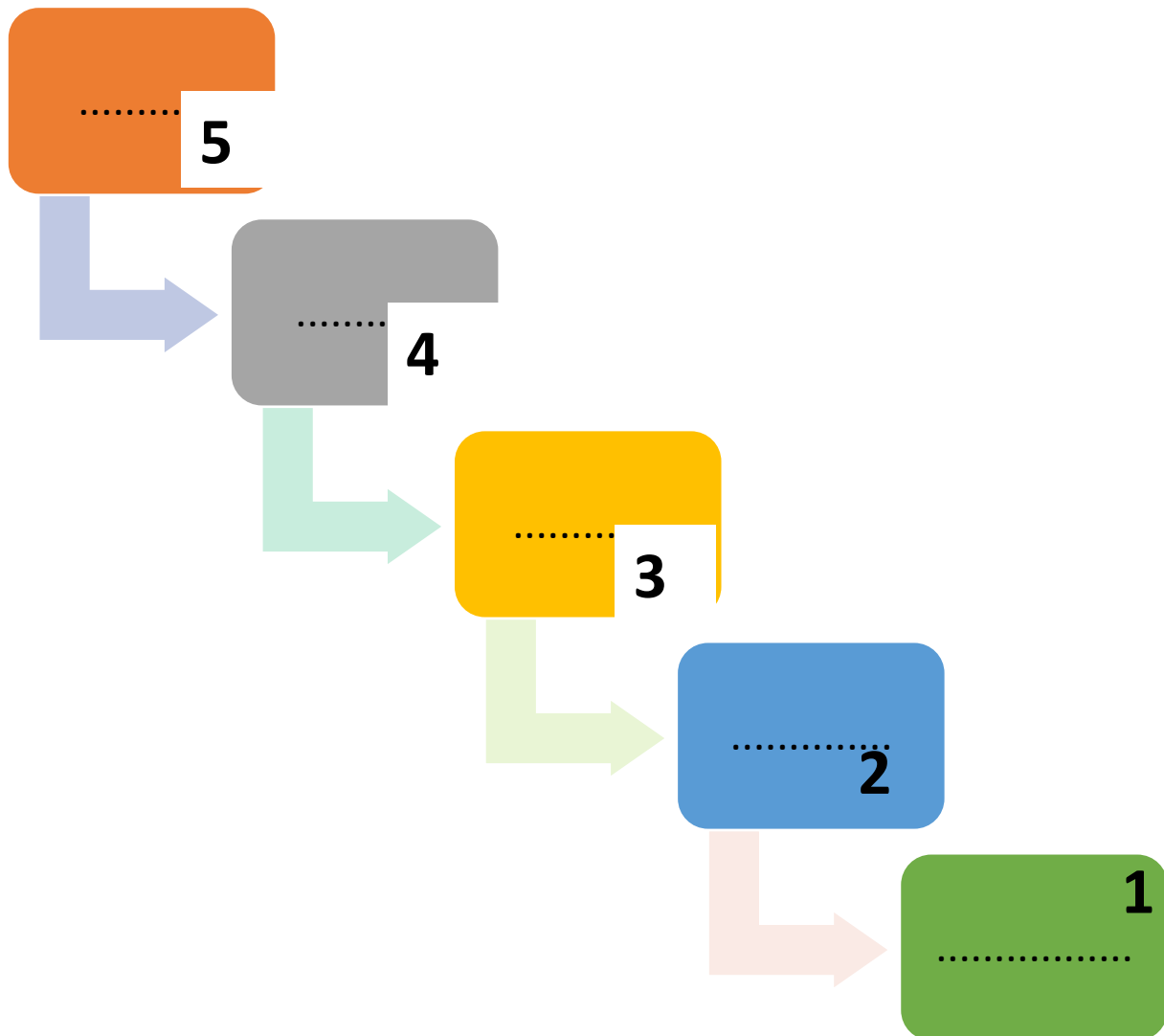




## Worksheet 4



Complete the diagram:





## Slide 5



### Classification of Living Things in the Local Environment

Classify the living things that you recorded in your notebook during your visit to the area surrounding your school according to the following table:

#### Names of living things

Groups	Names of living things	Common traits
Group (1)		<p>.....</p> <p>.....</p> <p>.....</p>
Group(2)		<p>.....</p> <p>.....</p> <p>.....</p>
Group(3)		<p>.....</p> <p>.....</p> <p>.....</p>
Group (4)		<p>.....</p> <p>.....</p> <p>.....</p>



## Slide 6



### Classification of Living Things in the Local Environment




Put (✓) under the appropriate classification for the groups that you previously classified according to the following table:

Groups	Insects	Birds	Mammals	Reptiles
Group (1)				
Group (2)				
Group (3)				
Group (4)				



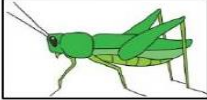



## Worksheet 7

Cut and paste the pictures to complete the food chain





→→

---

→→→

---

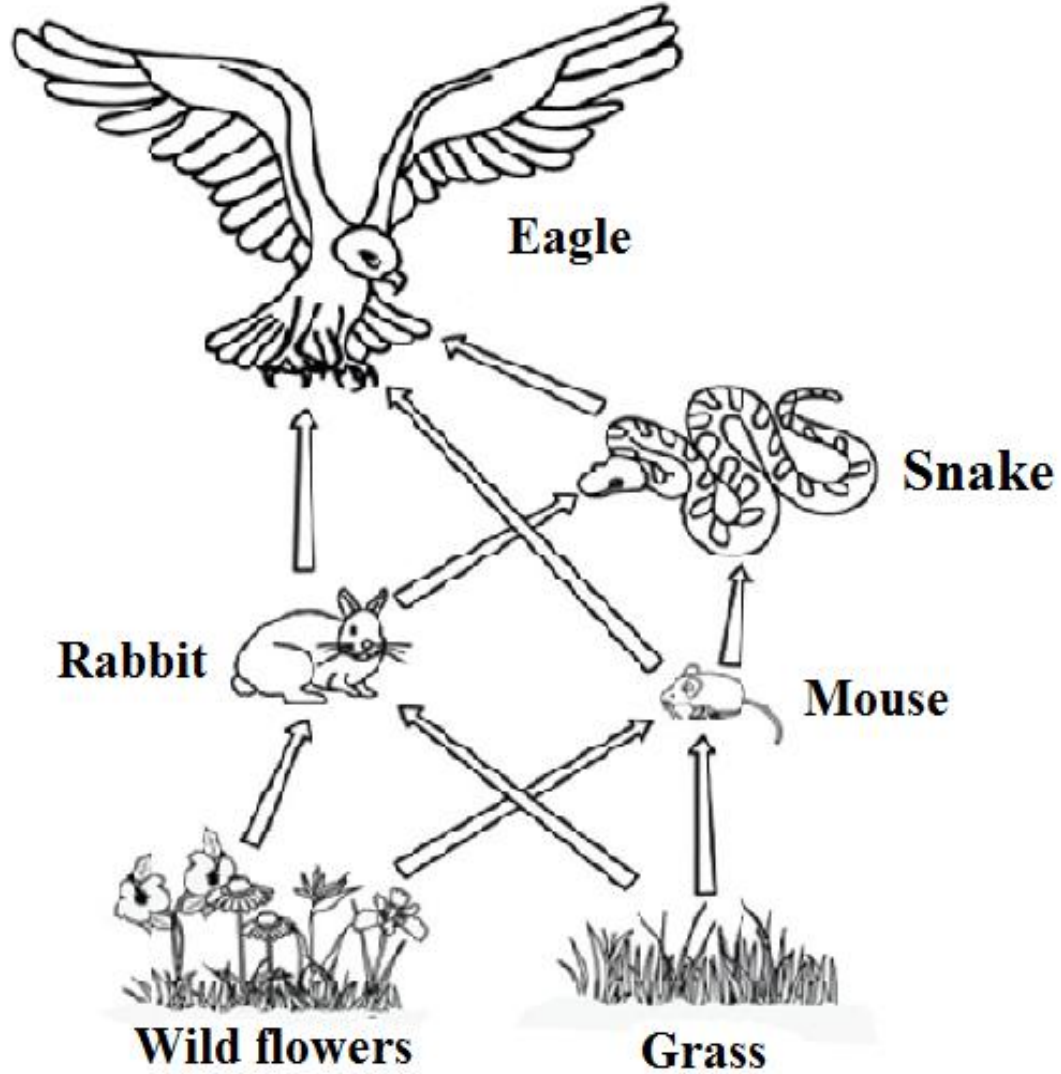





→→→



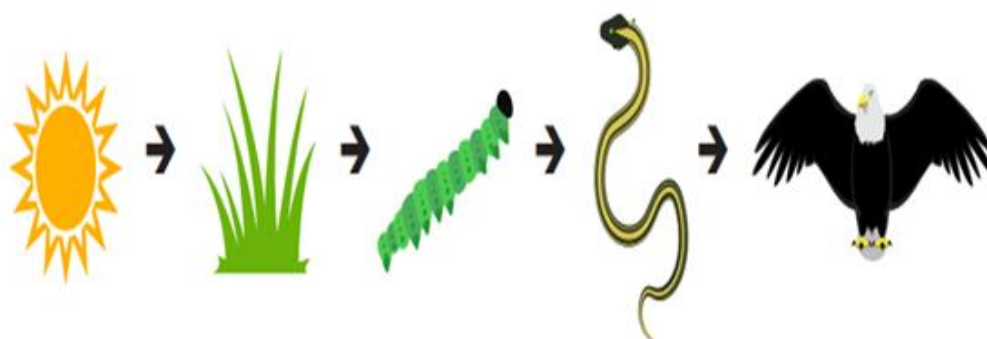
## Worksheet 8

Color the following food web



## Worksheet 9

Predict what will happen to the numbers of eagles if more **grass** is planted?





## Worksheet 10

Levels of organization in ecosystems

Name the picture using the table:

**Population**

**Ecosystem**

**Living thing**

**Ecological community**

**Biosphere**

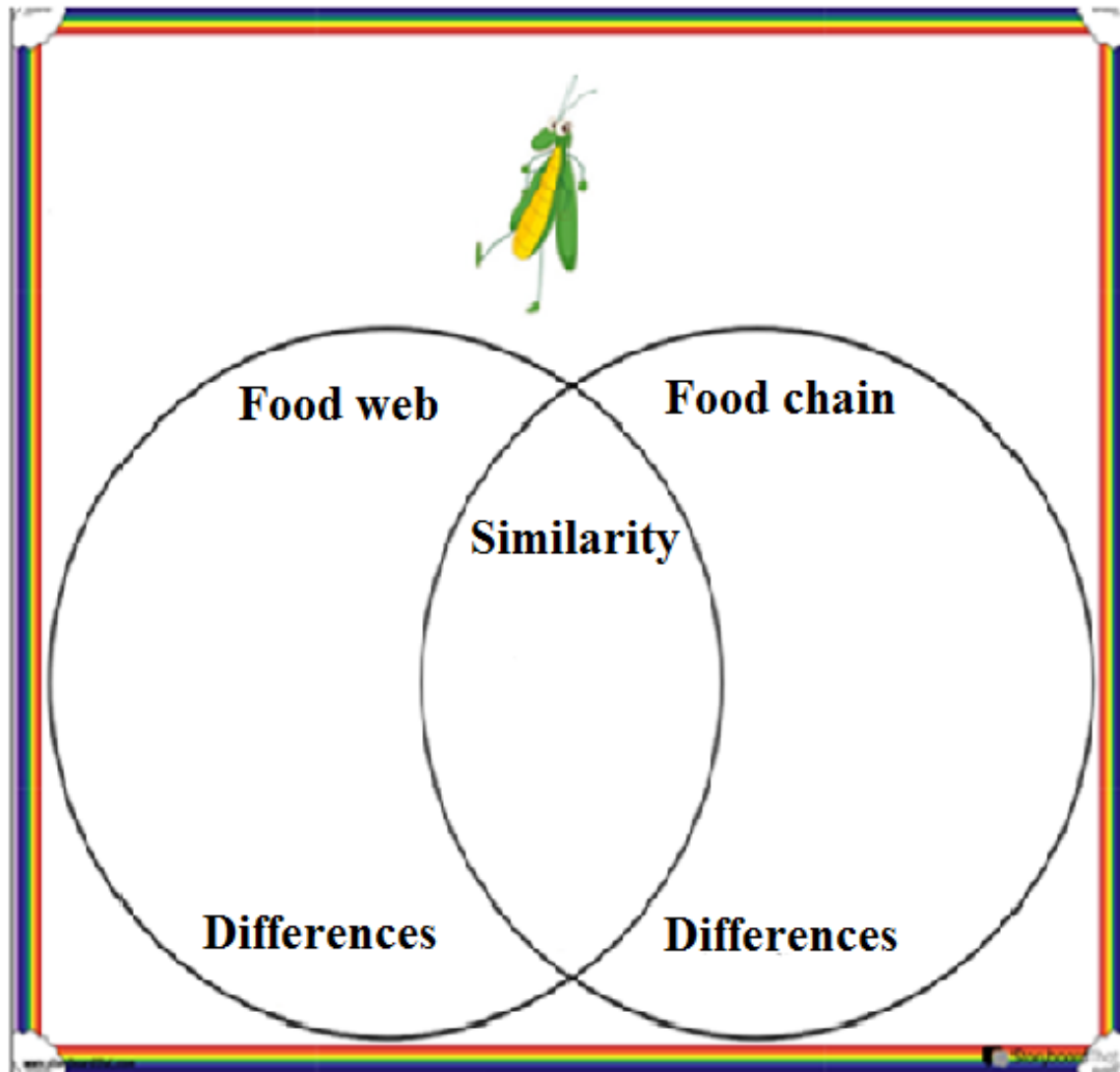


.....



## Slide 11

Complete the Venn-Diagram



## Topic: States of Matter



<p><b>K</b></p> <p><b>What do you know?</b></p>	<p><b>W</b></p> <p><b>What do you want to know ?</b></p>	<p><b>L</b></p> <p><b>What did you learn?</b></p>

## Worksheet 1 Assessment

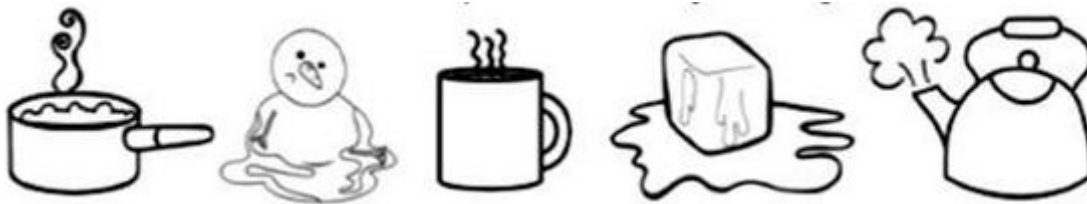
Circle and color the solid substances in the following



Circle and Color the gaseous substances in the following:



Circle and Color the figure that represents evaporation process





Slide 2

## Diagnosis Assessment

Indicate by true or false:

	Statement	True	False
1	Air has no volume or mass, it is nothing		
2	Air don't contain any materials, so we can't feel it or see it		
3	The snow particle is cold and hard and the water particle is large and soft		
4	The water particle changes according to the shape of the bowl because they are flexible	.	
5	Liquids contain particles that are larger or smaller than solids		
6	Particles of solids are stable		
7	Melting, freezing, and condensation are phenomena that occur only with water		
8	The bubbles of boiling liquid are air bubbles		
9	Melting the solid matter changes it into liquid matter		
10	freezing makes water particles bigger		
11	Wax melts ,metals don't melt		
12	When iron is heated and melted, the iron particles will also melt		
13	The size of water particles changes as the state changes		
14	Particles change during freezing		
15	The distance between the water molecules does not change with state		
16	The water molecules do not move faster when heated		
17	Evaporation occurs only during boiling		







## Worksheet 3

### Matter

Observe the picture below then complete it with suitable words:

Has mass and occupies a space	Has mass	Has volume
Temperature, light, and sound	Ice, wood, and air	Has different shape

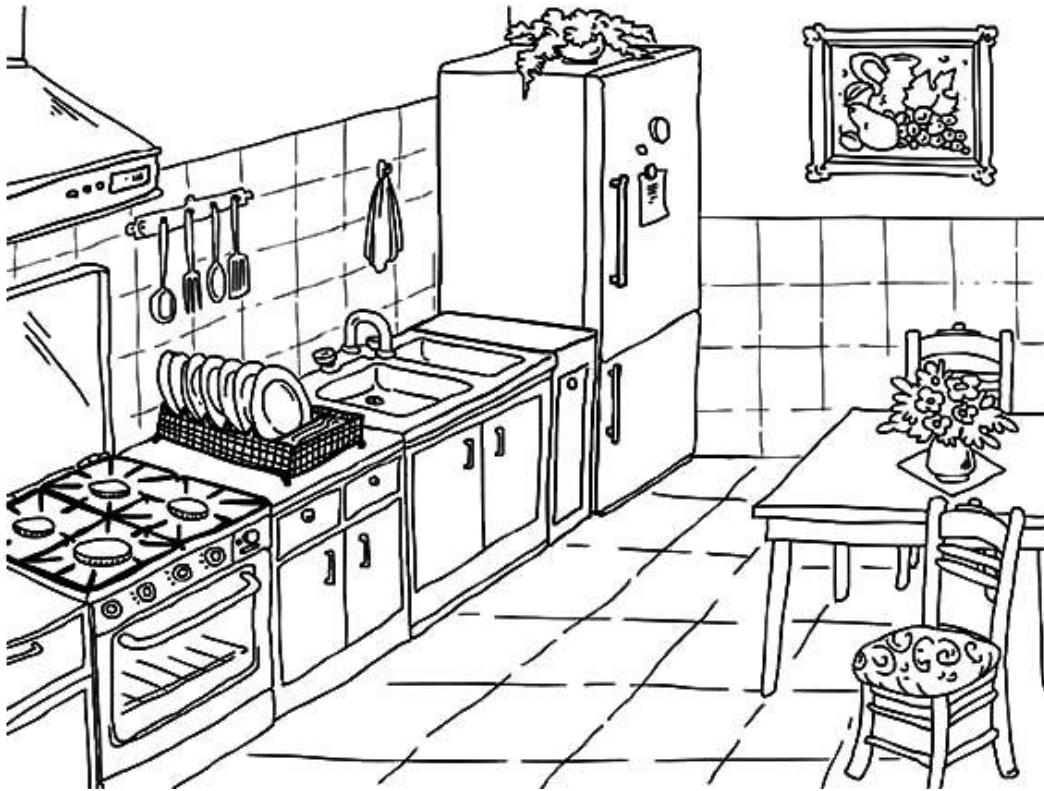


<u>Properties</u> ..... ..... ..... .....	<u>Definition</u> ..... ..... ..... .....
<u>Not a matter</u> ..... ..... ..... .....	<u>Examples</u> ..... ..... ..... .....

**Matter**









Choose and color 5 examples of matter in the following picture:



## Worksheet 4

Cut and paste the pictures according to its state

Solid	Liquid	Gas
		
		

## Think and Discover 1

 Paint	 Wind	 Leaf
 Helium	 Spoon	 Cake
 Cheese	 Smoke	 Soda
 Sock	 Air	 Vapor

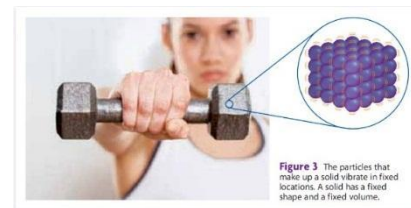
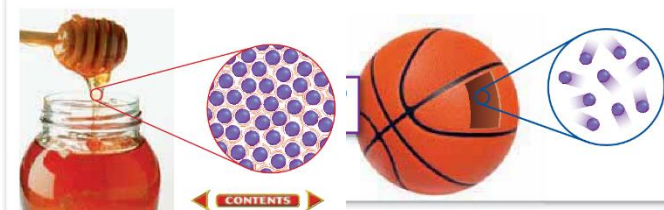
Color the matter that does not have a definite shape:



## Worksheet 5

### State of Matter

Indicate the state of matter of each picture below:



Complete the table by using the following words:

Fast	Slow	Medium	Big
Small	Definite	Indefinite	Medium

Comparing	Liquids	Solids	Gas
Particles			
Shape	.....	.....	.....
Volume	.....	.....	.....
Distance between particles.	.....	.....	.....
Moving particles	.....	.....	.....

## Think and Discover 2

### Melting and Evaporation

Circle the picture that expresses melting and evaporation:







### Think and Discover 3

## Freezing and Condensation

Circle the picture that expresses (freezing – condensation)





## Evaluation

## States of Matter









Name the change of state of matter:

evaporation

Condensation

Freezing

Melting

	to		=	<input type="text"/>
Ice		Water		
	to		=	<input type="text"/>
Water		Ice		
	to		=	<input type="text"/>
Popsicle		Chocolate Drink		
	to		=	<input type="text"/>
Chocolate Drink		Popsicle		

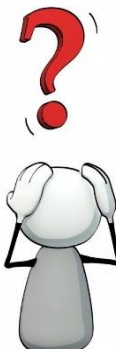
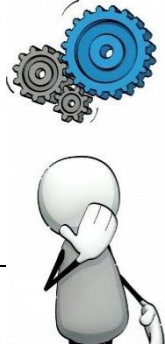
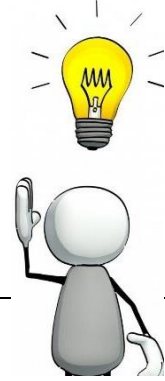
Slide (1)

**KWL table**

**Topic: Push  
and Pull**











What do you know about pull and push?	What do you want to know about pull and push?	What did you learn about pull and push?
		

## Worksheet 1

## Diagnosis Assessment

Choose the correct answer:

 <div>Pull</div> <div>Push</div>	 <div>Pull</div> <div>Push</div>
 <div>Pull</div> <div>Push</div>	 <div>Pull</div> <div>Push</div>
 <div>Pull</div> <div>Push</div>	 <div>Pull</div> <div>Push</div>

## Worksheet 2

### Diagnosis Assessment

Use the following statements to show the effect for the following picture:

Change direction

Stop motion

Move a body

Change shape

Speed down

Speed up



Slide 2

**Examples of Force**





## Worksheet 3

**Force**

Observe the pictures and complete the diagram:

Move a body	Stop motion	Change motion
Animals and plants	Throwing, carrying, kicking	Change speed



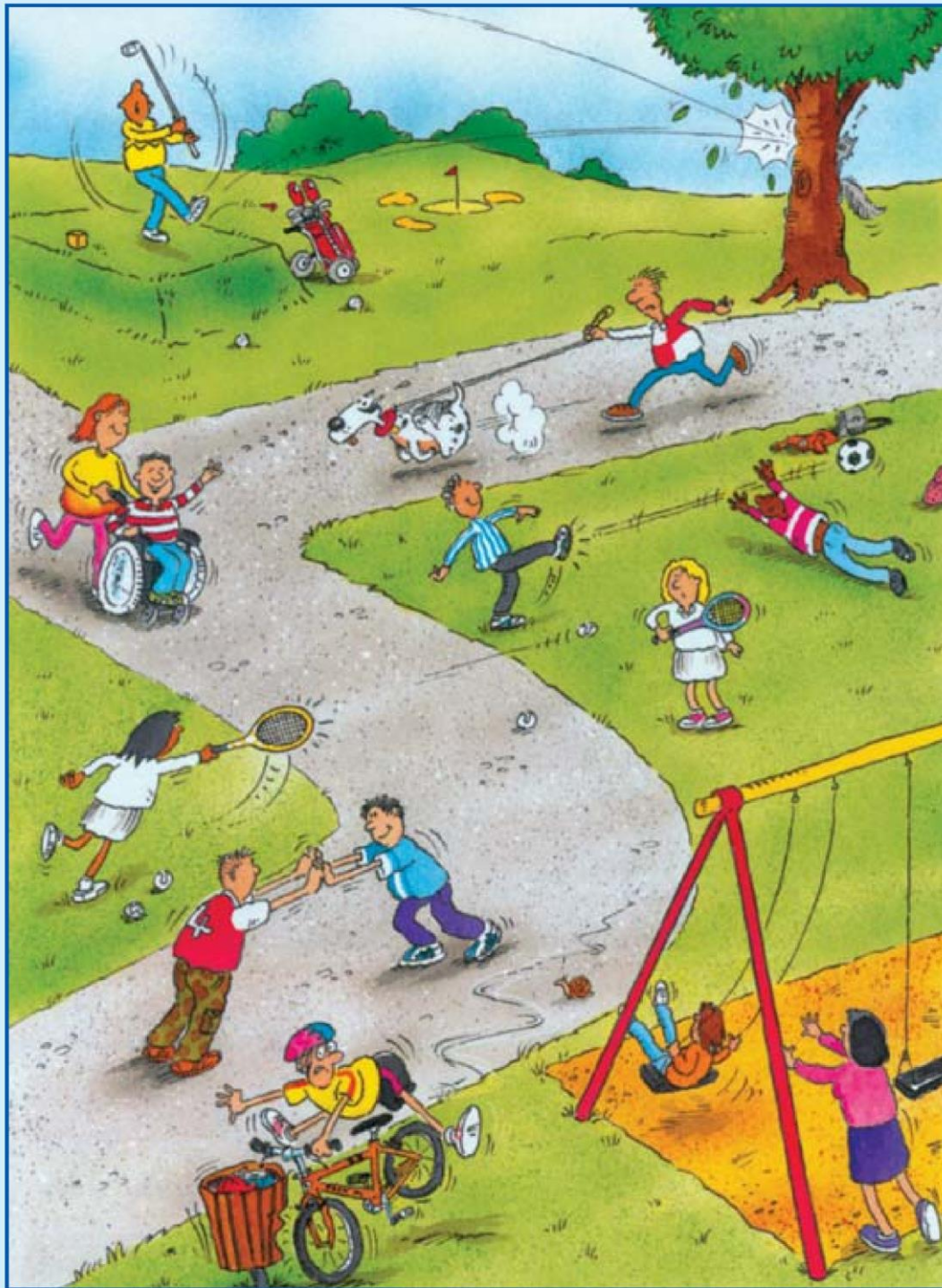
<u>Define</u> ..... ..... .....	<u>Characteristics</u> ..... ..... .....
<u>Examples</u> ..... ..... .....	<u>Non-Examples</u> ..... ..... .....

**Force**

## Assessment 1

Choose 10 forces from the figure and describe their effects:





## Worksheet 4

## Difference between Pull and Push



Using the following words describe each picture:

Push  
force

Pull force

More  
distant

Closer

Move  
and stop



Draw other examples about Pull force and Push force

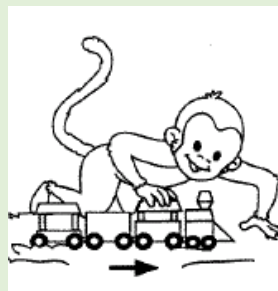
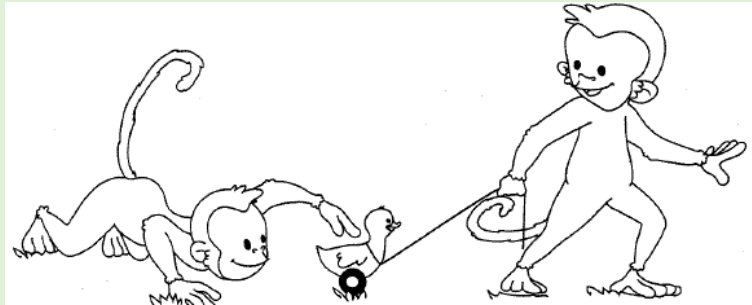
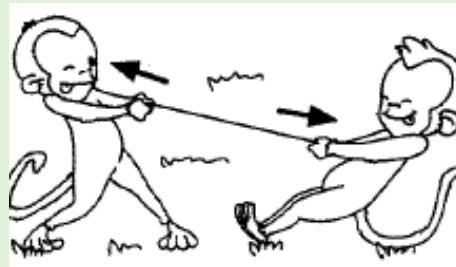
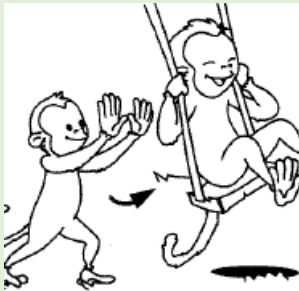
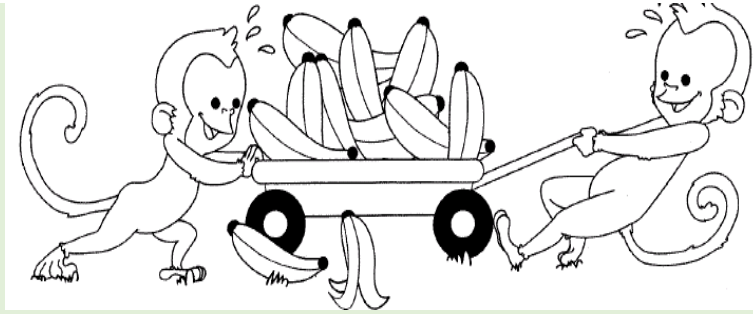
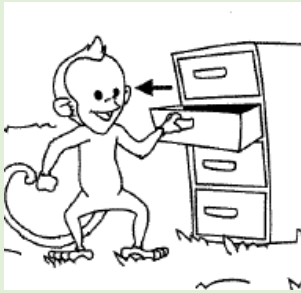
Push force

Pull force

## Worksheet 5

**Describe and Color**

Describe the action of the monkey in each picture, then color the Pull-in Red and the Push in Yellow:







## Pull and Push Machine



## Assessment 2



Choose the correct force:



Pull

Push



Push

Pull



Pull

Push



Push

Pull



Push

Pull



Pull

Push

Slide 4

**Force Effect on Body**

With the help of your partner, do this activity



**Put the ball in the middle of the stadium.**

- Is the ball in motion in this state?

**Push the ball toward your partner**

- What happens to the ball?

**Ask a partner to catch the ball**



- What happens to the ball?
- Does the ball stop?
- What do you conclude?

**Throw the ball again and move it with a huge force.**



Cindy kicks the ball. It  
kicks the ball very hard  
caused the ball to go

- What happens to the ball?
- Does the ball move with more speed than the first time?
- In which direction does the ball move?

**Ask your partner to throw the ball when it reaches to him**



- What happens to the ball?
- Is the ball direction changed?
- What do you conclude?

## Worksheet 6

## Effects of Force on Motion



Complete the sentence in front of the picture with suitable words:

Move

Slow  
down

Speed  
up

Change

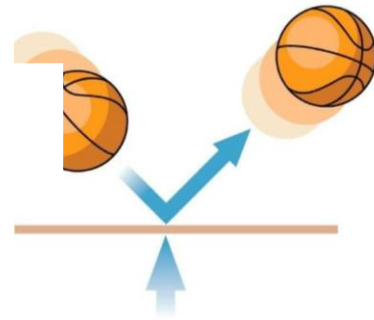
Stop

The force can ..... body.



The force can ..... or ..... moving  
body.

The force can ..... direction of body.



The force can ..... moving body.

### Assessment 3

Observe the picture then tick (✓) the suitable place in each case:



Case	Move	Stop	Speed up	Slow down	Change direction
Pressing on exchanger	.....	.....	.....	.....	.....
Pressing the brakes	.....	.....	.....	.....	.....
Change direction from left and right	.....	.....	.....	.....	.....
Hit a tree	.....	.....	.....	.....	.....
Hitting another bike from behind	.....	.....	.....	.....	.....
Hitting another bike from the side	.....	.....	.....	.....	.....

## Worksheet 7

## Effect of Force on the Shape

Write the type of deforming in each picture using the words in the boxes then indicate if its Always – temporary:

Deforming

compressing

Pressing

Flexing

Softening

elongating



.....



.....



.....



.....



.....



.....



.....



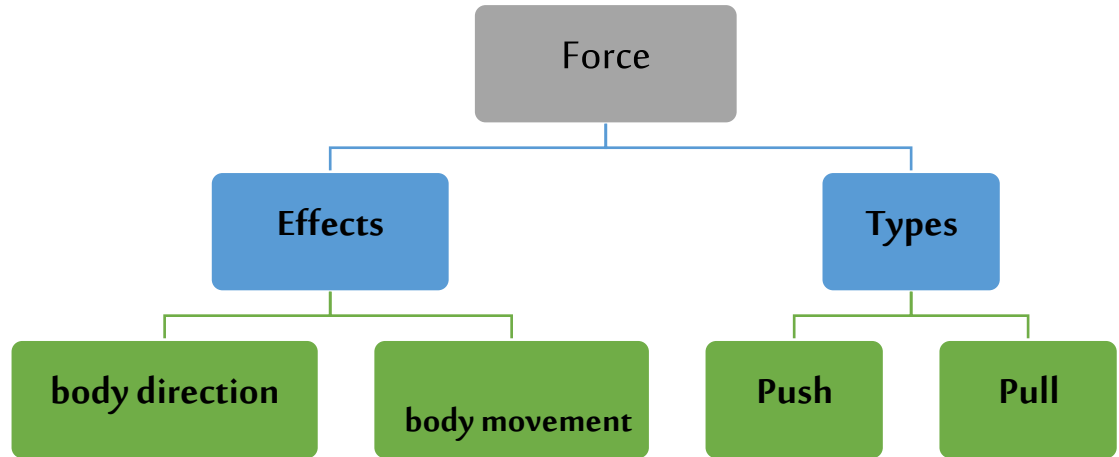
.....



.....

Slide 5

**Force**











## KWL table

**Topic:**  
**Magnet**



K	W	L
What do you know about the magnet?	What do you want to know about the magnet?	What did you learn about the magnet?
		
		



## Diagnosis Assessment

Indicate by true or false:

No	Statements	True	False
1	The magnet attracts all materials.		
2	The magnet attracts all metals.		
3	The magnet attracts aluminum so it's metal.		
4	All metal with silver color will be attracted by a magnet.		
5	As the size of the magnet increases, its action becomes bigger.		
6	The strong magnet is made from iron or steel only.		
7	Magnet only produces magnetic force.		

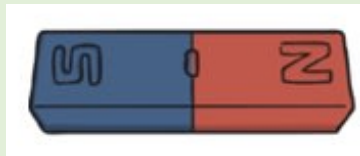


## Worksheet (1)

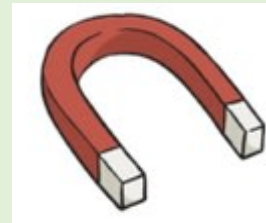
### Types of Magnet

Write the name of each magnet:

Bar magnet	Cylinder magnet	Horseshoe-shaped
U shaped magnet	Circular magnet	Button magnet



.....



.....



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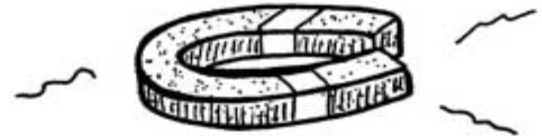


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## Worksheet (2)

### Magnetic Matter

Below are materials made from different matter, predict which is attracted by a magnet, then check it to write the result:



Substances	Material made from	Attracted or repelled by a magnet	
		Predict	Result
Hairpin	Iron	.....	.....
Metal coin	Copper	.....	.....
Ball	Nickel	.....	.....
Ring	Silver	.....	.....
Shirt button	Plastics	.....	.....



Foil paper	Aluminum	.....	.....
Spoon	Wood	.....	.....
cube	Cobalt	.....	.....
	.....	.....	.....
	.....	.....	.....



To conclude: things attracted by the magnet are :.....  
.....

### Worksheet (3)

## Magnetic Force





There are many ways to measure magnetic force, some of them are shown below:



Use this way to measure the force of this magnet, then write the result in the table:

Magnet	Maximum number of	Maximum distance
--------	-------------------	------------------



Shape	Material made from	the paper clip	away from a paper clip
	.....	.....	.....
	.....	.....	.....
	.....	.....	.....
	.....	.....	.....
.....	.....	.....	.....

To conclude, the relative force for a magnet depends on its :

.....

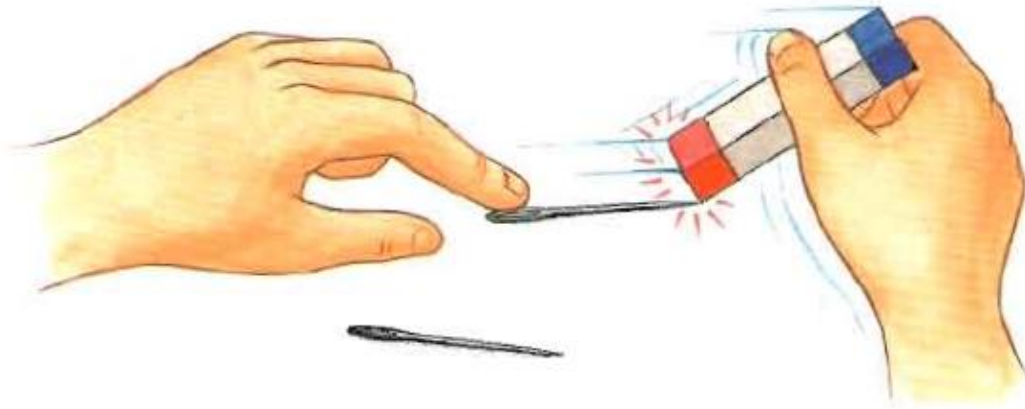
## Worksheet (4)

### **Magnet Rubbing**

#### **Procedures:**

**Follow your teacher's steps**





### Observations:

Are iron filings attracted to the plastic pen after rubbing?

(Yes-No)

Conclusion:

Has the plastic pen turned into a magnet?

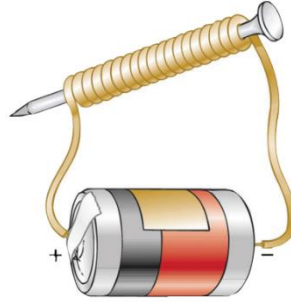
(Yes- No)

### Worksheet (5)

## Electric Magnet

### Procedure:

Follow your teacher's steps



Results:

Are iron filings attracted to the nail after connecting to the wires of the battery?

(Yes-No)

Conclusion:

Has the nail turned into a magnet?

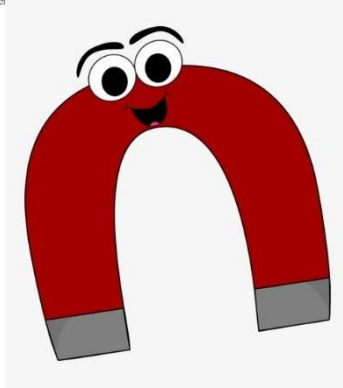
(Yes- No)

## Worksheet (6)

### What do you know about magnets?

What is magnet?

How to convert an iron nail into a magnet?



What objects are  
attracted to  
magnets?

How to  
measure the  
strength of  
magnets?

What objects are not  
attracted to magnets?

## Worksheet (7)

### **Magnet used to Solve Problem**

On your way back from school, you drop your iron key into a deep hole, what can you do to solve this problem?



Tell a story about this problem using the following pictures:






Slide 1

Topic: Light



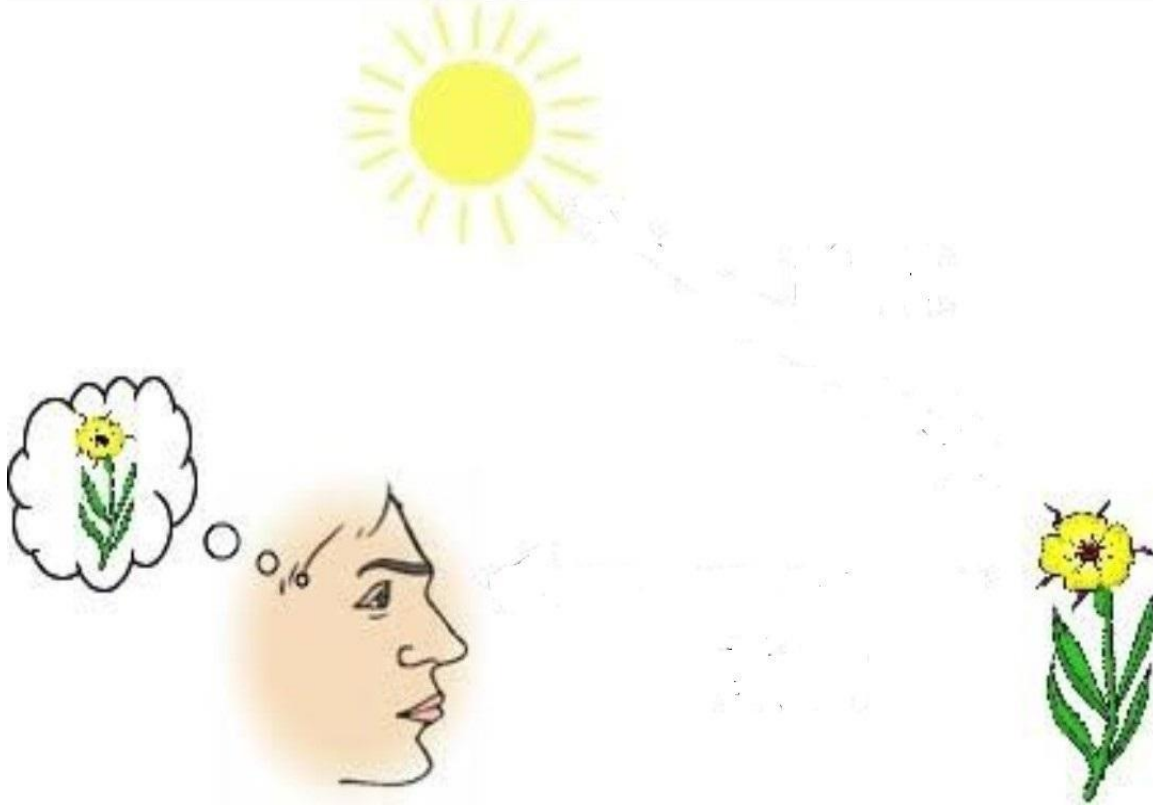
# KWL Table Light

What I Know K	What I want to Know W	What I learned L
		



Draw the path (ray) of light for a person to see the flower. Use arrows to show it

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Classify the following materials: (transparent – translucent – opaque)

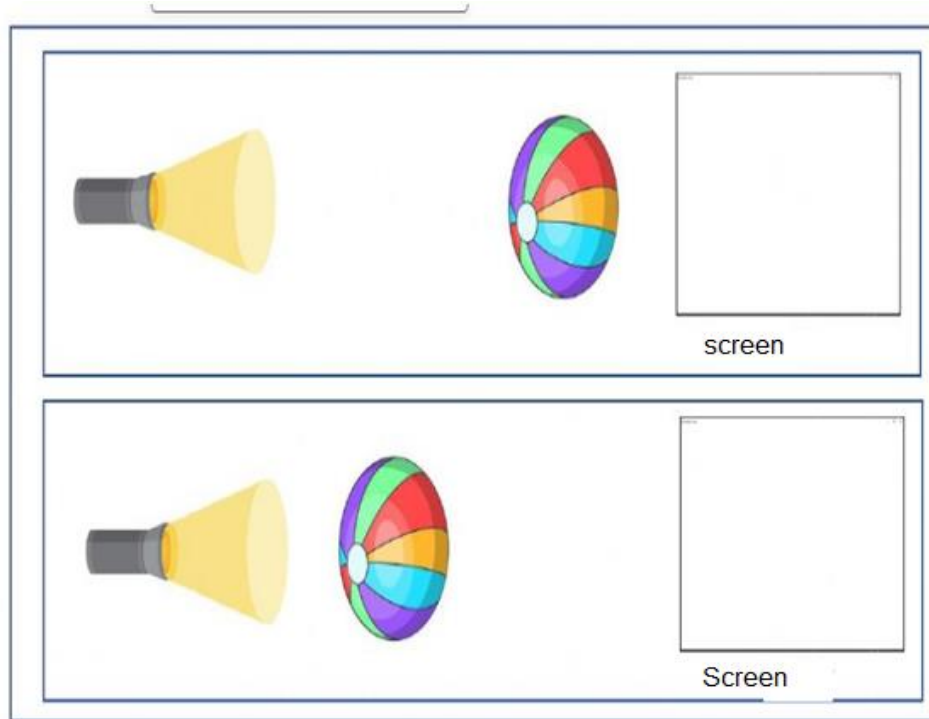




Indicate by true or false:

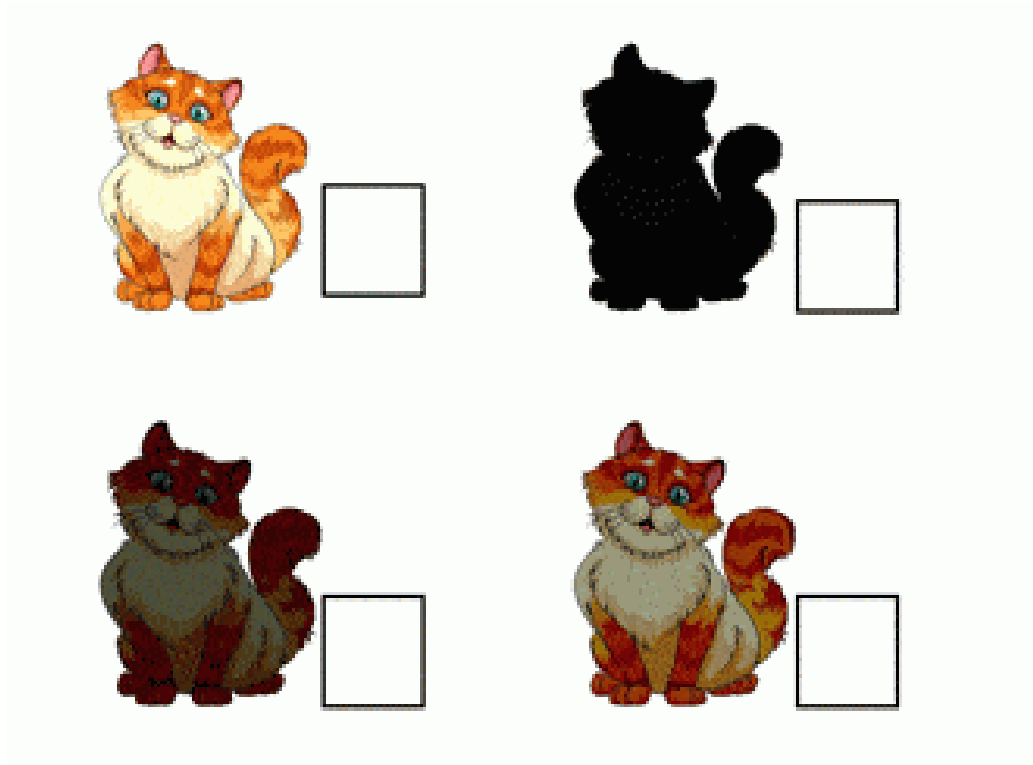
N	Sentence	True	False
1	We can see objects in darkness		
2	Only bright objects can be seen		
3	The candle is the only source of light		
4	Light travels more at night than on day	.	
5	Only dim light sources remain around the sources		
6	Light needs to travel		
7	Hot objects are brighter than cold objects		
8	Light travels from the source for a certain distance and stop		
9	Opaque objects absorb light		
10	Transparent objects reflect all the light to the eye		
11	Aluminum Foil is a transparent object		
12	Shadow is formed by the reflection of light		
13	Colored plastic is transparent object		
14	The eye is the source of light		
15	Moon emits light by itself		

Draw the appropriate shadows for the ball when the torch is lit



Which of the following pictures is more luminous?

Write 1 for the picture with the lightest, and 4 for the picture with the least light.



There is a picture that does not have light

Can we see anything in this picture? (Yes- No)

What do you need to see things?



## Which Pictures are More Luminous?

Write 1 for the picture with the lightest, and 4 for the picture with the least light.

Can we see better during the day or at night? (Night/day)




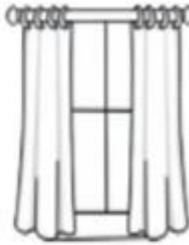












Why? .....



Draw 4 sources of light




**Observe** the following pictures and put a tick (✓) under the pictures that represent the light sources, then color these sources

			
lamp	electroscope	mirror	curtain
			
			
sun	moon	candle	eye
			



Classify the following light sources into natural sources and artificial sources, then cut out a picture of the natural sources and paste it at the natural, and cut the artificial sources and paste it at the artificial.



natural





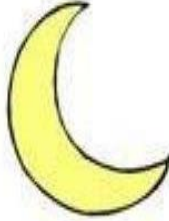


artificial

Artificial



### Worksheet (9)

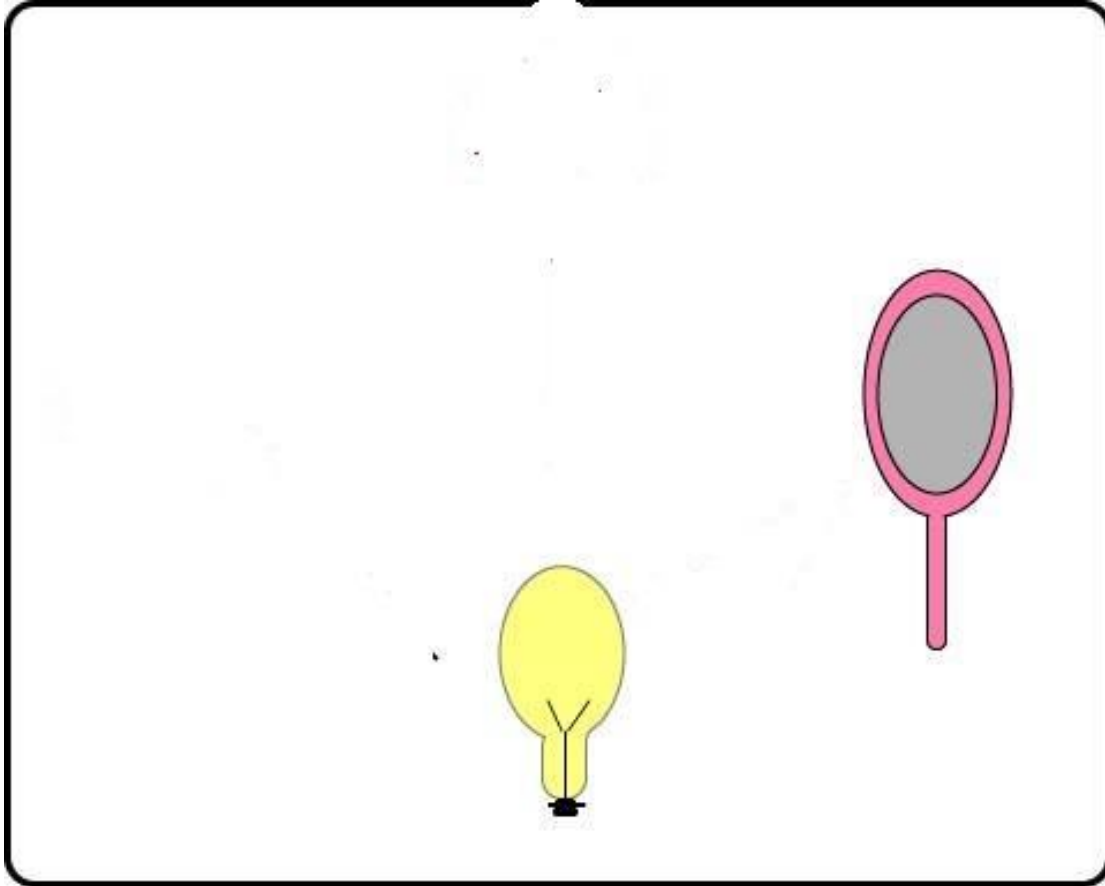
Classify the following sources of light according to the nature of their source into natural light sources by writing the letter (N) - artificial light sources by writing the letter (A)



## Worksheet (10)

Draw the path of light when the lamp is lit in the following image (you can use a pencil to draw this path)





## Worksheet (11)

Using an electroscope - a cartoon plate - a transparent plastic cup - a colored plastic cup, determine if it is possible to see the light behind each material. Circle yes or no.

OBJECTS	Can light be seen behind these objects? (Forecasts)	Can light be seen behind these objects? (Notes)
	Yes – No	
	Yes – No	
	Yes – No	
	YES – NO	



## Worksheet (12)

Cut and paste the picture according to its type:



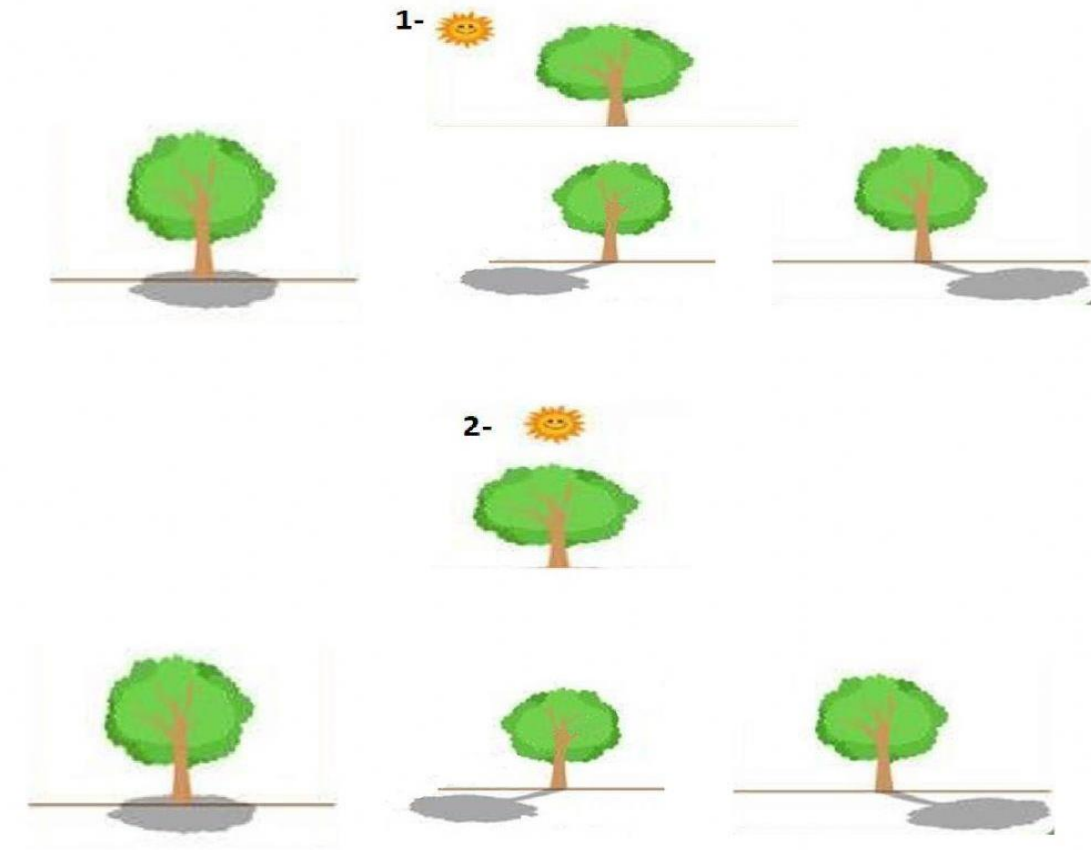
transparent objects		translucent objects		Opaque objects	





## Worksheet (13)

Choose the appropriate shade location for the tree according to the position of the sun from the tree in each of the following cases:



## Slide 1

### Learning Table

### Topic: Heat



K	W	L
What do you know?	What do you want to know?	What did you learn?



## Worksheet 1

### Heat is a form of energy

After **observing** what the teacher did;  
choose what will happen to the balloon

The balloon will  
inflate

The balloon will  
not inflate



The balloon will  
inflate

The balloon will  
not inflate



Use the following words to explain what happened in each case

Expansion

Light reflection

Light absorption

Less  
temperature

High  
temperature

No expansion





## Worksheet 2



### The Relationship between Body Temperature and its Volume

Which of the two nails is larger?



Does the temperature of the larger nail differ from the smaller nail?

Yes

No

Circle the largest bottle



Does the temperature of the water in the larger bottle differ from the temperature of the water in the other bottles?

Yes

No



## Worksheet 3

### Thermometer

Observe the following pictures then name each device using the following words:

Digital  
thermometer

Laser thermometer

Mercury  
thermometer

Thermometer





## Worksheet 4

### Heat conductors and insulators

Indicate which of the following materials are conductors of heat and which are insulators.

Object	The material	Conductors of heat	Insulator
Paper	 Carton	.....	.....
Teaspoon	Aluminum	.....	.....
Coin	 Copper	.....	.....
Clip	 Wood	.....	.....
piece of wool	 Wool	.....	.....
Wire	 copper	.....	.....
Platter	 Plastic	.....	.....

According to the above, the conductors of heat are:

.....

The insulators are:

.....

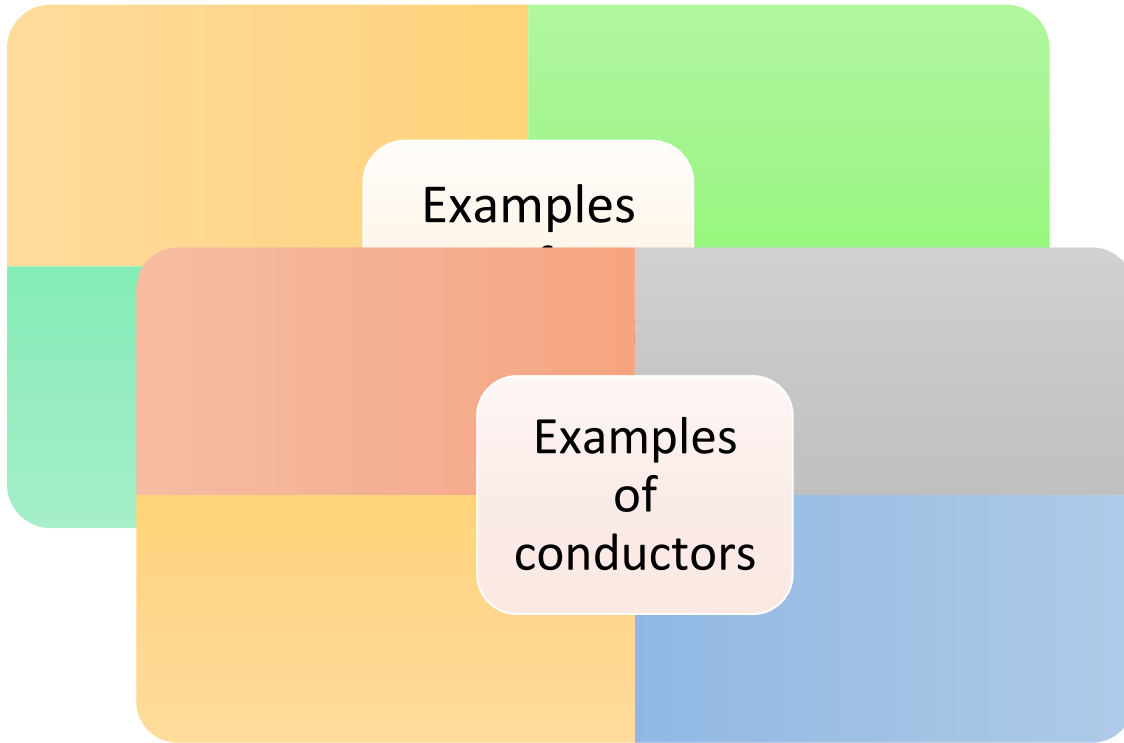




## Worksheet 5

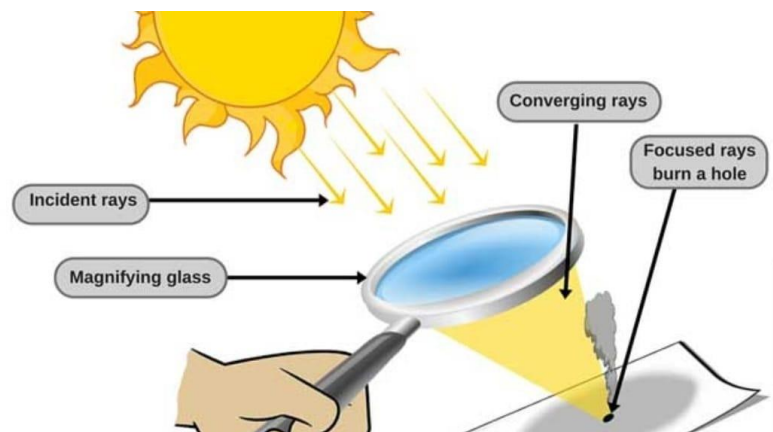
### Life examples of heat conductors and heat insulators

From what you have learned about materials that conduct heat and insulators, draw examples of tools you use in your daily life that represent conductors of heat, and others that represent insulators.



## Worksheet 6

### The Sun is a Source of Heat and Light



Let's have fun with the sun



Observe what the teacher has done and indicate what will happen to the paper

Paper burns

The paper will not burn

Which words

what paper more

of the following is the correct explanation of happened to the (you can use than one word):

Sunlight temperature

Drop in temperature

High temperature

Light reflection

Dispersion of light

Convergence of light

## Worksheet 7

### Thermal Effect of Light

1. Using the following image, circle the ice cubes that will melt first



2. Using the words in the boxes (you can use more than one word in different places), place under each color a sheet of paper with ice cubes to explain what the teacher did in the classroom

less  
temperature

Total  
reflection of  
light

Absorbing  
less light

Absorbing a  
large amount  
of light

Reflection of  
some amount  
of light

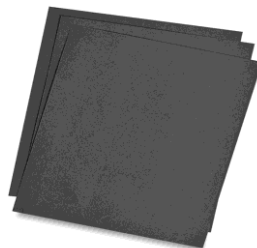
Slow melting  
of ice cube

High  
temperature

Fast melting of  
ice cube



Slide



2



Dialogue between

Summer and Winter

Listen from your teacher to the dialogue that takes place between winter and summer, and then answer



In a calm night and warm atmosphere, in this beautiful universe, two competing seasons, summer, and winter, met and the following debate took place between them, as each boasted of himself:

**Summer:** Peace, mercy, and blessings of God be upon you.

**Winter:** May the peace, mercy, and blessings of God be upon you.

**Summer:** Welcome to the season of snow and rain.

**Winter:** Welcome to the hot sun.

**Summer:** Why do people always think of me as the owner of the hot sun, and the sun in your time does not radiate heat?

**Winter:** Because people think that the earth's summer days are very close to the sun, but on my days they think that the earth is very far from the sun.

**Summer:** This is a mis-conception.

**Winter:** I know. The earth is closer to the sun in winter than in summer.

**Summer:** We must correct this mistake among people, and that the reason for the high temperature during my days is the fall of the sun's rays perpendicularly to the hemisphere facing the sun, and the farthest half of the sun's rays that reach away, scatter and winter appears.

**Winter:** You are right, dear summer, just as the long hours of your day, and the absorption of the earth and the heat on it, cause your temperature to rise.

**Summer:** I think this misconception has been modified by people all over the world.

**Winter:** I think so my friend Summer

**Summer:** Thank you, Winter.

## Worksheet 8

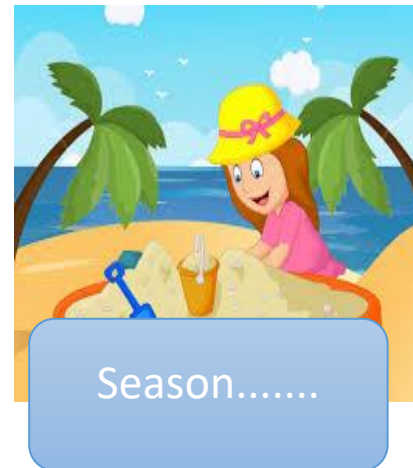
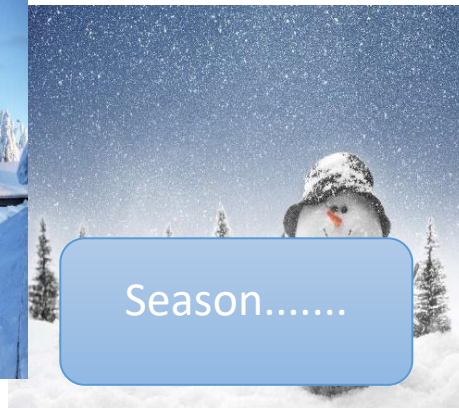
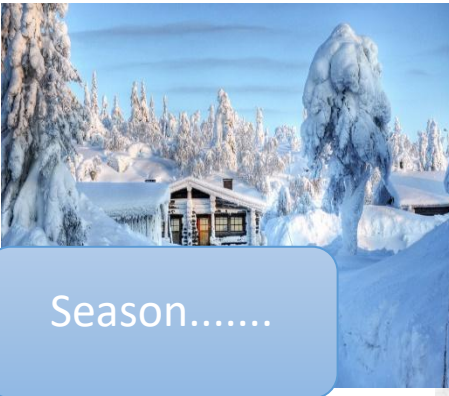
### The Temperature in Winter and Summer

From the previous dialogue between the summer and winter seasons, draw out the misconception that people have about winter and summer

.....

.....

Use the information in the dialogue and distribute the following pictures between summer or winter.



Season.....

Season.....





## Worksheet 9

### The Temperature in the Mountains

Observe the following pictures:



Complete the following diagram using the correct words

Elevated

Not elevated

There is snow

There is no  
snow

Away from  
the sun

close to the  
sun

Mountain  
top



## Worksheet 10

### The Importance of the Sun for Plants

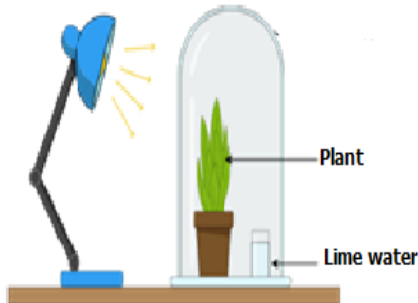
Observe the two diagrams to show the differences below it.

Wither

Grow



Predict what could happen to the plant and the lime water in this image.

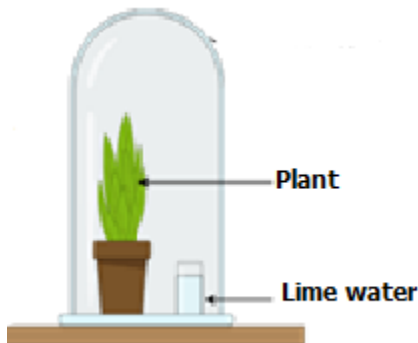


It grows and does not turbid the lime water

It grows and lime water becomes turbid

Withers and turbid lime water

Predict what could happen to the plant and the lime water in this image.



It grows and does not turbid the lime water

It grows and lime water becomes turbid

Withers and turbid lime water

### Slide 3

## The Sun and Cold-blooded Animals

Dear teacher, Hand out role cards to your students and start reading the dialogue to them, offering to help them as they role-play.



**The frog:** Good morning, Bear.

**The frog:** Where are you going, Bear?

**The frog:** I will come with you, I need the sun.

**The frog:** Your fat, Bear, Cold-blooded people don't need the sun.

**The frog:** As cold-blooded animals, our body temperature adapts to the place we live in.

**The frog:** On the contrary, we need the sun.

**The frog:** Cold-blooded animals are exposed to the sun, getting heat by direct exposure to sunlight.



**The bear:** Good morning, my friend

**The bear:** I will go to sit in the sun a little bit

**The bear:** How do you need the sun and you are cold-blooded animals?

**The bear:** Yes, Cold-blooded animals don't need the sun.

**The bear:** But I think you don't need the sun

**The bear:** And why do you need the sun?

**The bear:** I didn't know, frog, the importance of the sun to you.

Thank you, my friend, frog, for this information. Let's go to sit in the sun together.



## worksheet 11

### The Sun and Cold-blooded Animals

Collaborate and have fun

**Through the role your classmates played, identify:**

What is the wrong idea in the bear's mind about cold-blooded animals?

They live in cold temperatures

It does not need the sun

It needs the sun

What did the explanation the frog give to the bear to correct his misconception about the importance of the sun to cold-blooded animals?

It does not need the sun

The sun helps the frog make its own food

The sun helps the frog to keep warm

Do you agree with the bear about the importance of the sun to cold-blooded animals?

Yes

No