



مشروع بناء برامج تعويضية

لصعوبات تعلم المواد الدراسية للاجئين السوريين

لبنان - الأردن - تركيا (الدخول السوري)

# الدليل المرجعي

## لصعوبات تعلم العلوم

للمد من الفاقدين التعليمي لدى  
اللاجئين السوريين

2



الصف الثاني الأساسي





## فريق الإعداد

### أ.د/ياسر سيد حسن

استشاري العلوم (رئيس الفريق) - أستاذ مناهج العلوم - كلية التربية - جامعة عين شمس

### د/ سالي كمال إبراهيم

مدرس المناهج وطرق تدريس العلوم - كلية التربية - جامعة عين شمس

### أ.د/ هند علي محمد

أستاذ الفيزياء - كلية التربية - جامعة عين شمس

### د. مروة خميس محمد عبدالفتاح

خبير محتوى تعليمي / تخصص علوم وتربية بيئية - الأردن

### د/شيري نصحي يوسف

مدرس المناهج وطرق تدريس العلوم - كلية التربية - جامعة عين شمس

### أ/ حمزة جمال حاج حسين

خبير مادة العلوم في مدارس ومعاهد في الباب بسوريا

## الفريق الميداني بالدول

أ/ هدي محمود أبو الجدل  
معلمة العلوم في مدارس الكويت الخيرية  
معلمة العلوم في مدرسة كويت الخير

أ/ نسرین رشید قاسم  
مستقة مادة العلوم في مدارس الكويت الخيرية

أ/ وائل نزار شلق  
معلمة العلوم في مدارس الكويت الخيرية  
متسق مادة علوم الحياة ومدرس في مدارس الإيمان

لبنان

### أ/ أيمن الحسيني

معلم مادة العلوم في مدارس ومعاهد، معد مواد  
معلمة العلوم في مدارس الكويت الخيرية  
وبرامج تعليمية

### أ/ رفيق وجيه المصري

سوريا  
معلم مادة الفيزياء في مدارس ومعاهد، معد  
معلمة العلوم في مدارس الكويت الخيرية

### أ/ سجود محمد محمود البيكات

معلمة علوم في مدارس اللجوء السوري

### أ/ صفاء محمد احمد العلاونة

معلمة علوم في القطاع الخاص

الأردن

معلم العلوم في مدارس الكويت الخيرية

التصميم الفني

أ / ياسر محمود مصطفى

خبير تصميم المناهج التربوية

المراجعة اللغوية

أ / أحمد الشناوي

خبير اللغة العربية

المراجعة العلمية

أ. د / احمد رياض السيد

أستاذ متفرغ العلوم البيولوجية



## تدقيق ومراجعة

أ/ نسرين قاسم

منسقة العلوم في مدارس الكويت الخيرية

Slide 1

Learning Table

Topic: Human Body Parts and Senses

| What do you know? | What do you want to want? | What did you learn? |
|-------------------|---------------------------|---------------------|
|                   |                           |                     |

## Worksheet 1

Indicate which statements are true and which are false:

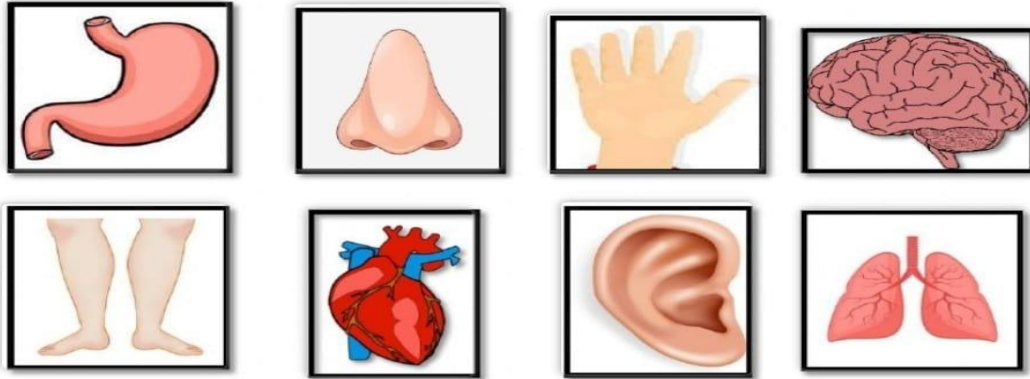
| No | Phrase                                                                               | True | False |
|----|--------------------------------------------------------------------------------------|------|-------|
| 1  | The human body is only made up of systems and organs.                                |      |       |
| 2  | The organs of the human body work separately from each other.                        |      |       |
| 3  | The mouth consists of teeth and tongue only.                                         |      |       |
| 4  | Each taste zone of the tongue is distinct from the other.                            |      |       |
| 5  | All parts of the human body are covered with same thickness skin.                    |      |       |
| 6  | Skin color tends to get darker when the body is exposed to sunlight for a long time. |      |       |
| 7  | Very hot foods could be eaten.                                                       |      |       |
| 8  | Scratched eyes could be painful.                                                     |      |       |
| 9  | The Smell sense can be developed by using a lot of perfume.                          |      |       |
| 10 | More sugar and salt should be added to the fruits and food.                          |      |       |
| 11 | The sides of the tongue are the region responsible for sweet-tasting.                |      |       |
| 12 | Ears can be cleaned with matches.                                                    |      |       |



## Worksheet 2

### Human organs

Cut and paste the pictures in the appropriate place in the table:



| Internal organs | External organs |
|-----------------|-----------------|
|                 |                 |



### Worksheet 3

#### The Importance of Sense Organs

Match each sensory organ in column (A) to the picture that represents the task it can perform in column (B).

(A)

(B)



## Worksheet 4

### Role of Senses in our Live

Draw the things you hear, the things you taste, the things you touch, and the things you smell in your life.



|                                                                                                                       |                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
|  <p><b>Things you can hear</b></p>   |  <p><b>Things you can taste</b></p>  |
|  <p><b>Things you can smell</b></p> |  <p><b>Things you can touch</b></p> |

## Worksheet 5

### Role of Senses in our Live



Circle the things you can hear with your ears.



## Worksheet 6

### Human Body systems



Write the names of the systems in the boxes under the correct picture

Respiratory system

Circulatory system

Digestive system

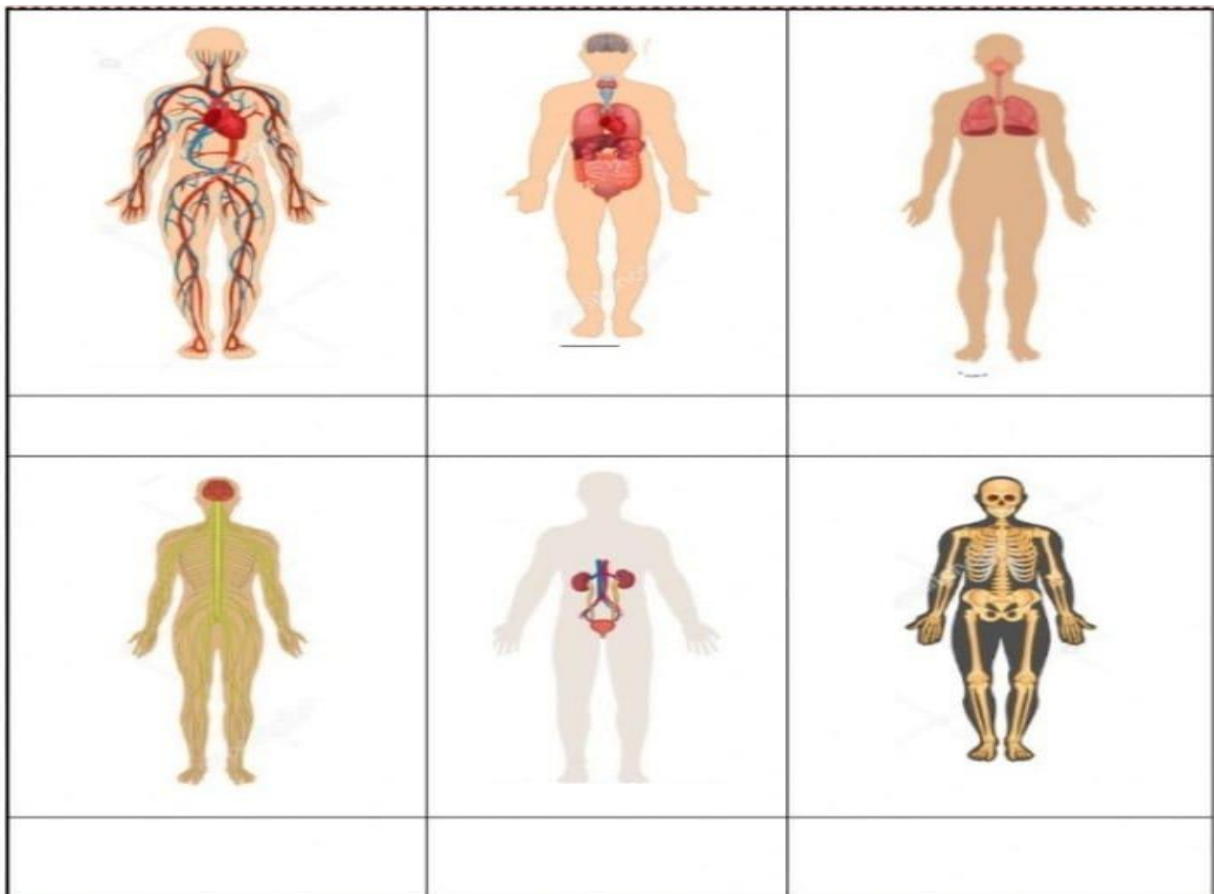
Skeletal system

Urinary system

Nervous system

### Worksheet 7

#### Components of the Human Body



Arrange the following components in the human body from largest to smallest

Cells

Organs

Systems

Tissues

Match the components of the human body with similar building components for a house

Cells

Closets

Systems

Walls

Organs

Roles

Tissues

Bricks

Slide 2

Mouth Parts

Hand out role cards to your students and start reading the dialogue to them, helping them during the role play.



I am the oral cavity

I am the space between the lips and the cheek on one side, and the teeth and gums on the other, and I am always wet because of the salivary glands that are under the tongue, and the teeth are inside me.



I am the lips

The lips are in the mouth, forming the front border of the mouth opening, and I am a soft, smooth, flexible structure, and the outer part of me consists of a thin layer.



I am the tongue

It consists of muscle fibers and is divided into two parts: the oral part and the pharyngeal part. I help you with swallowing, tasting, and speaking. Below, there are salivary glands that secrete saliva that keeps the mouth moist, and these glands secrete enzymes that help digest food.



I am the teeth

I will be in your mouth and my number is 32 and I divide as follows:

- Incisors: 4 front teeth in the upper jaw and 4 in the lower jaw.
- Canines: 4 pointed teeth located on either side of the incisors, two of them in each jaw.
- Anterior molars: These are 8 teeth between canines and back molars:
- Back molars : 8 flat teeth located in the back of the mouth, and their function is to grind food.
- Wisdom molars: 4 teeth that erupt late at the age of about 18.

## Worksheet 8

### Mouth Parts



Write the parts of the mouth.

.....

.....

.....

.....

Match column (A) with the corresponding column (B):

( A )

It consists of incisors, canines, front and rear molars

It contains salivary glands, and is divided into an oral cavity part and a pharyngeal part

The space between the lips and cheek on one side, and the teeth and gums on the other

Being in the mouth, I am soft, flexible and smooth structure

( B )

Mouth cavity

Lips

Tongue

Teeth

## Worksheet 9

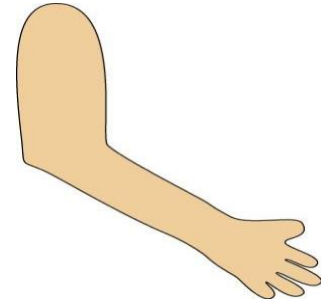
### Skin

Predict the nature of the skin covering each of the following areas of your body



Thin

Thick



Thin

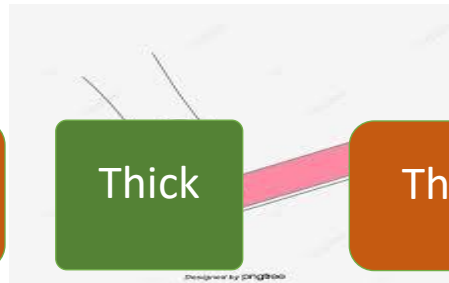
Thick

Thin

Thick



Thin



Thick

Thin



Thick

Thin

## Worksheet 10

### Function of the Body Senses

Match each picture in column (a) to one of the body parts shown in column (b).

(a)



(b)



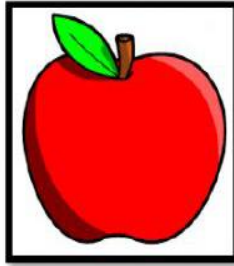
## Worksheet 11

### Taste Sense





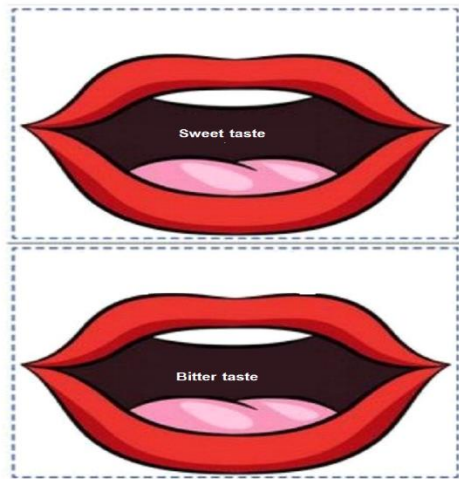
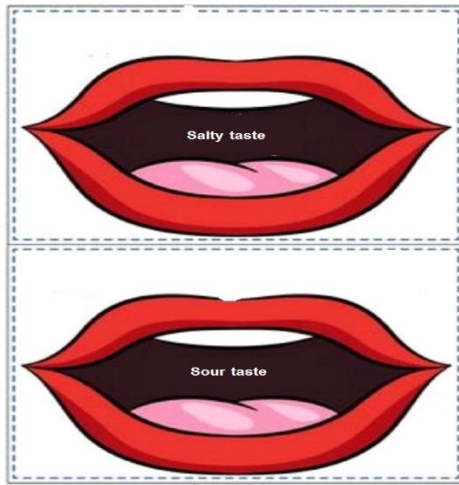
Circle the object you can taste.



## Worksheet 12

### Taste Sense

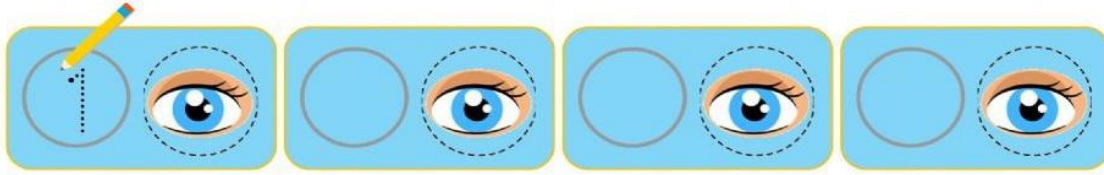
Design a poster by cutting each picture and placing it according to the taste that it represents, whether it is salty, sweet, sour or bitter.



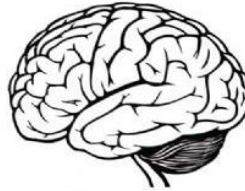
## Worksheet 13

### Sight Sense

Write the number of things you can see and color it.



6



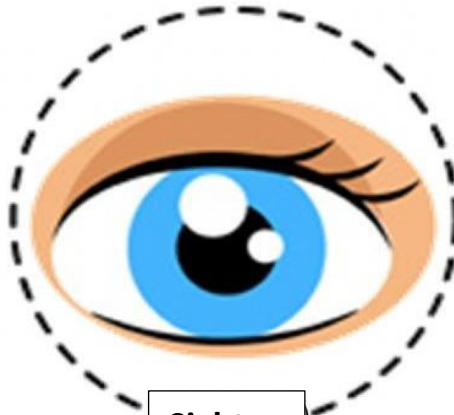
7



1



5



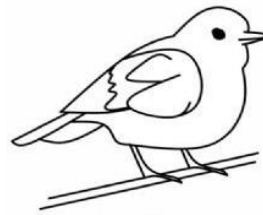
Sight



2



4



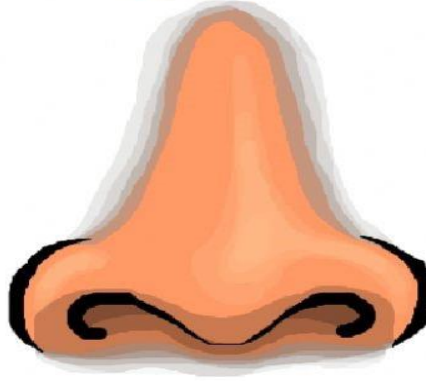
3

## Worksheet 14

### Smell Sense



Circle the pictures that you can smell.



## Worksheet 15

### Smell Sense



Cut and paste the pictures in the appropriate place.

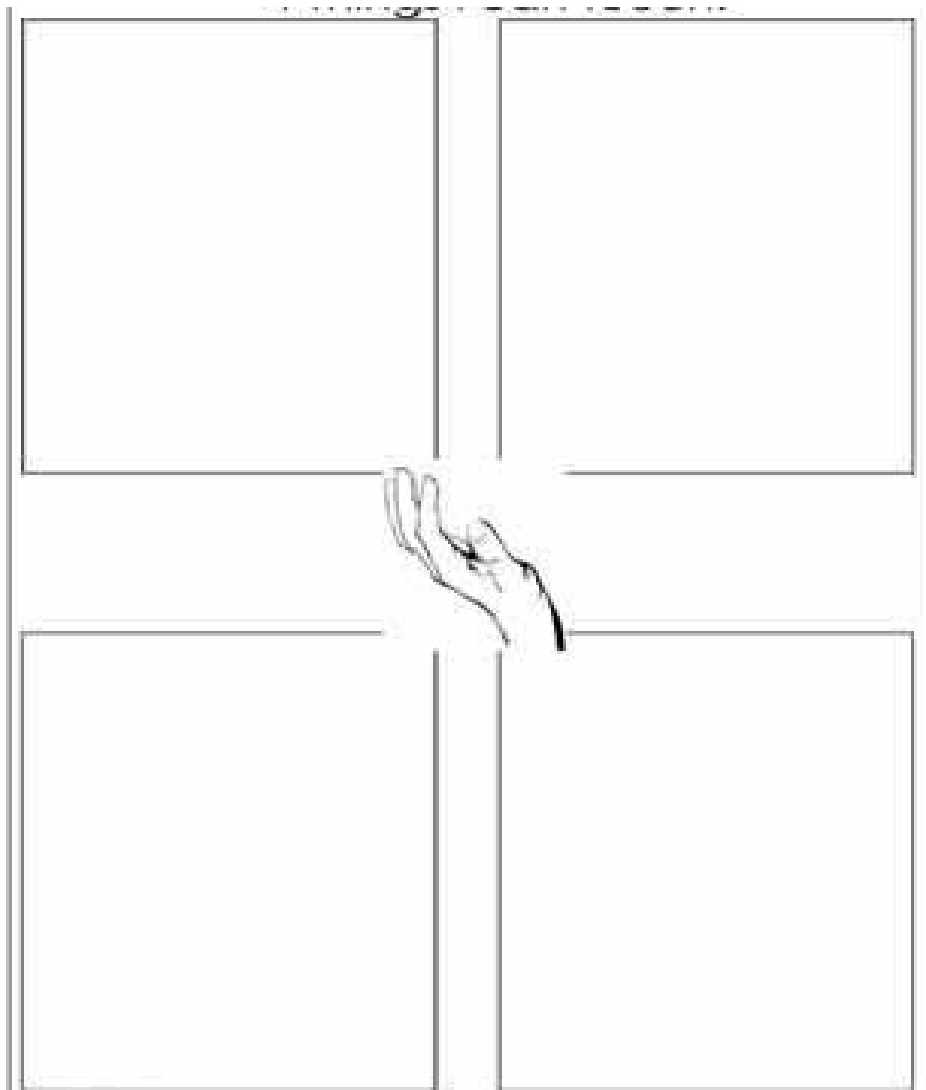
| Pleasant odor  |                                                                                   | Unpleasant odor  |                                                                                   | No odor  |                                                                                     |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                |  |                  |  |          |  |
|                |  |                  |  |          |  |



## Worksheet 16

### The sense of Touch

Draw different examples of objects you can touch.

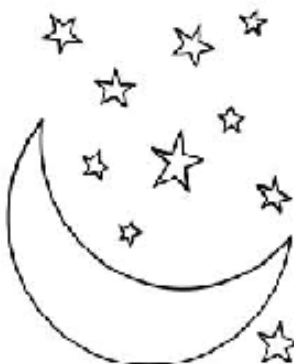


## Worksheet 17

### The sense of Touch



Color by red the objects you can touch and by blue the objects you can't.

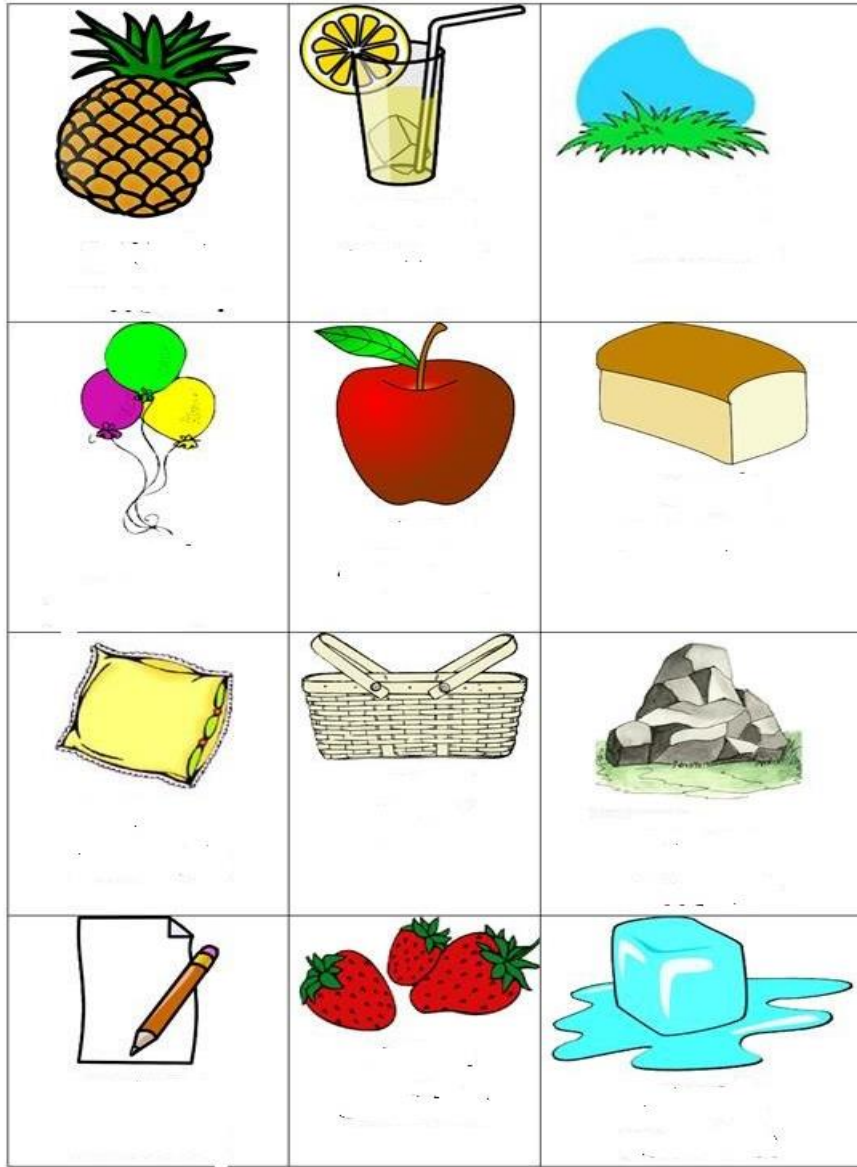


## Worksheet 18

### The sense of Touch



Write S under the smooth object and R under the rough one.



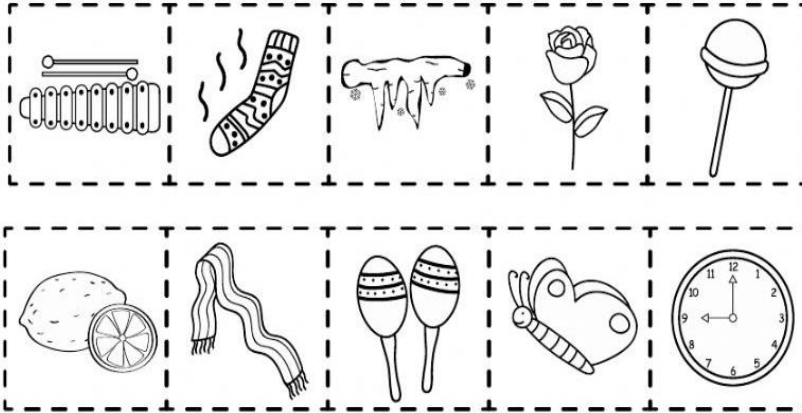
## Worksheet 19

## The Five Senses



Cut and paste the pictures in the appropriate place.

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |



## Worksheet 20

### How to Protect the senses?



State which senses will be affected by these actions:



1



2



3



4

Slide (1)

## KWL Learning Table

**Topic:**  
**Animals**



| K                                                                | W                                                                        | L                                                                  |
|------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------|
| <p><b>What do you know about animals and social insects?</b></p> | <p><b>What do you want to know about animals and social insects?</b></p> | <p><b>What did you learn about animals and social insects?</b></p> |
|                                                                  |                                                                          |                                                                    |

## Worksheet (1)

### The Insects

- a. Solve the exercises in the link.



- b. Do these insects live alone or together?  
c. What do we call these insects?  
d. How many parts does the body of an insect consist of?



## Worksheet (2)

### Diagnosis Assessment

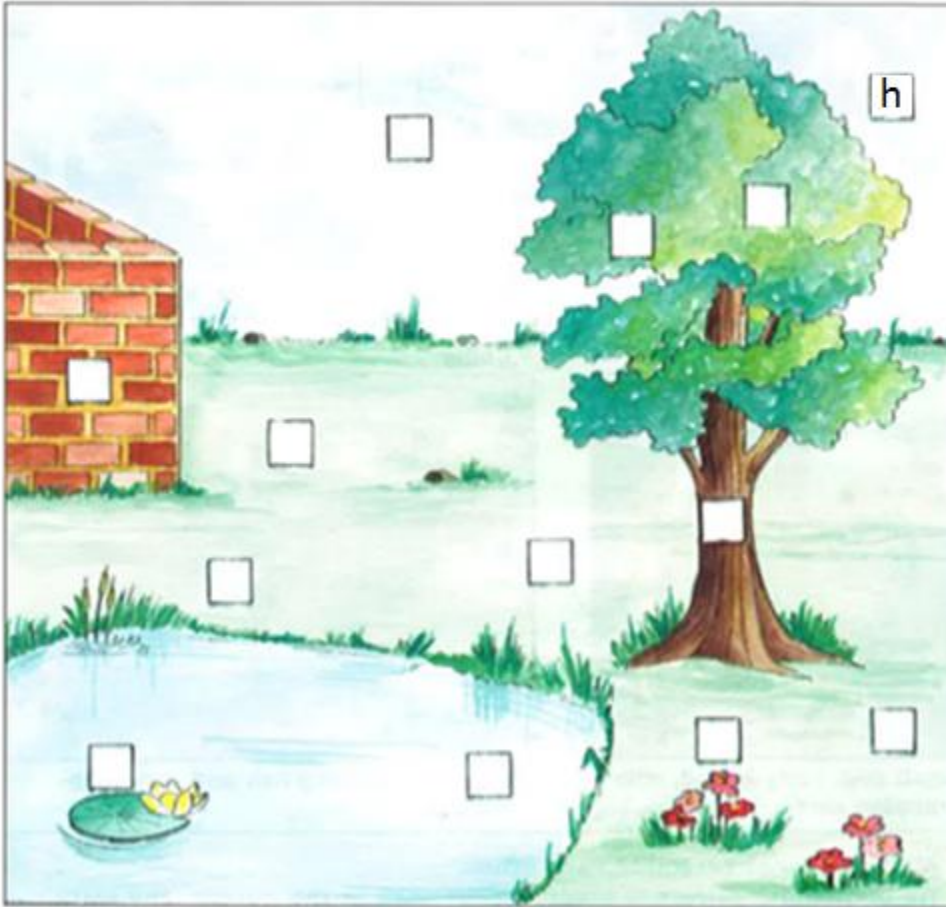
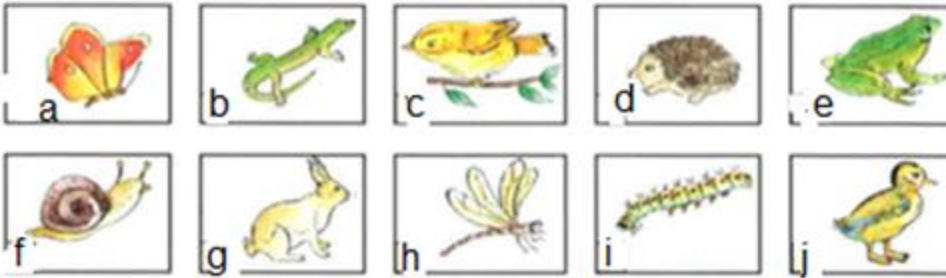
Read the following sentences. Write True or False:

| No | Sentences                                                                   | True | False |
|----|-----------------------------------------------------------------------------|------|-------|
| 1  | Birds breathe like mammals.                                                 |      |       |
| 2  | Reptiles and fish have scales.                                              |      |       |
| 3  | Fish and amphibians have gills to breathe.                                  |      |       |
| 4  | Some amphibians have legs.                                                  |      |       |
| 5  | Birds are covered with feathers.                                            |      |       |
| 6  | Ants and bees are social insects.                                           |      |       |
| 7  | All animals live in the same natural environment.                           |      |       |
| 8  | There isn't any difference among animals that live in the same environment. |      |       |
| 9  | Skin covers all animals.                                                    |      |       |
| 10 | All animals breathe by lungs as humans.                                     |      |       |
| 11 | Frog lives only on land.                                                    |      |       |

## Worksheet (3)

### Animals in the Natural Environment

- Match each animal to its habitat.

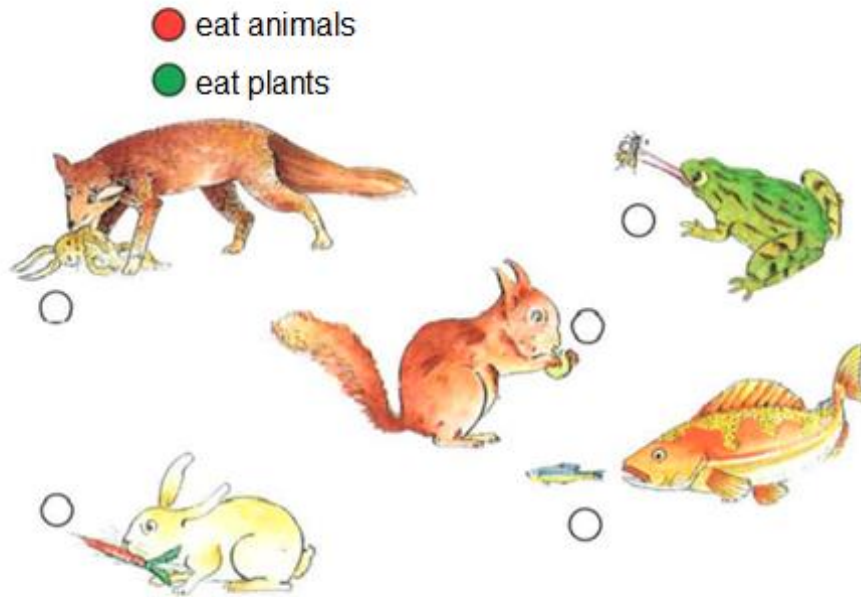




## Worksheet (4)

### Each animal Has its Own Specific Food

Color in red animals that eat other animals and in green animals that eat plants:



## Worksheet (5)

### Animal's Characteristics

a. Match each animal with its habitat:



turtle



Shark



Monkey



Squirrel



Lion



Desert



Mountains

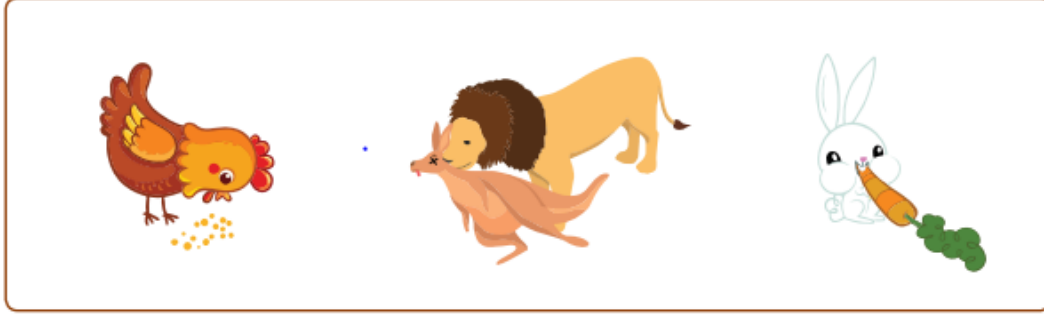


Sea



Forest

b. Observe the picture and answer the following questions?



1. Determine what each animal eats

Rabbit: lion: hen:

2. Answer:

- Are all animals eating the same food? .....
- Are all animals having the same size? .....
- Are they living in the same habitat? .....

3. Complete the following conclusion:

Animals have different ....., they eat ..... Food,  
and live in ..... habitat

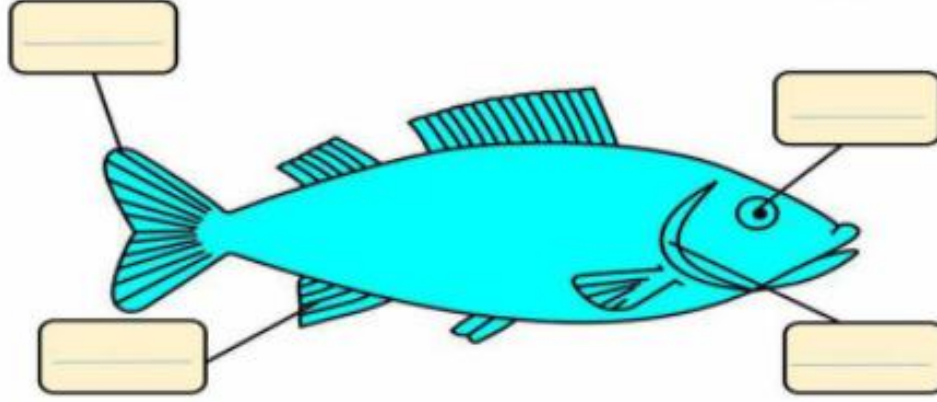
## Worksheet (6)





## Parts of Fish

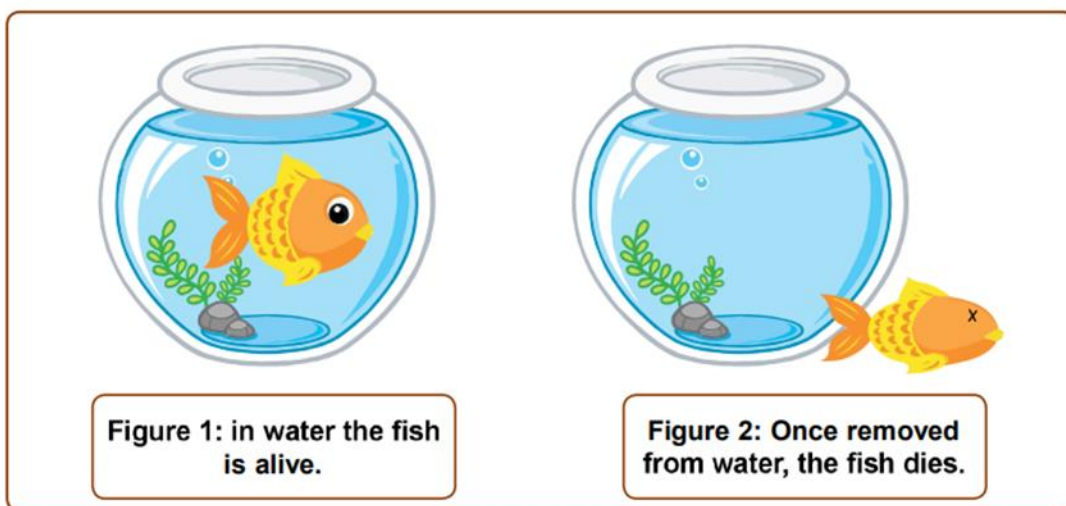
Write the parts of fish:



## Worksheet (7)

### Fish

**Observe the picture, then answer the questions**

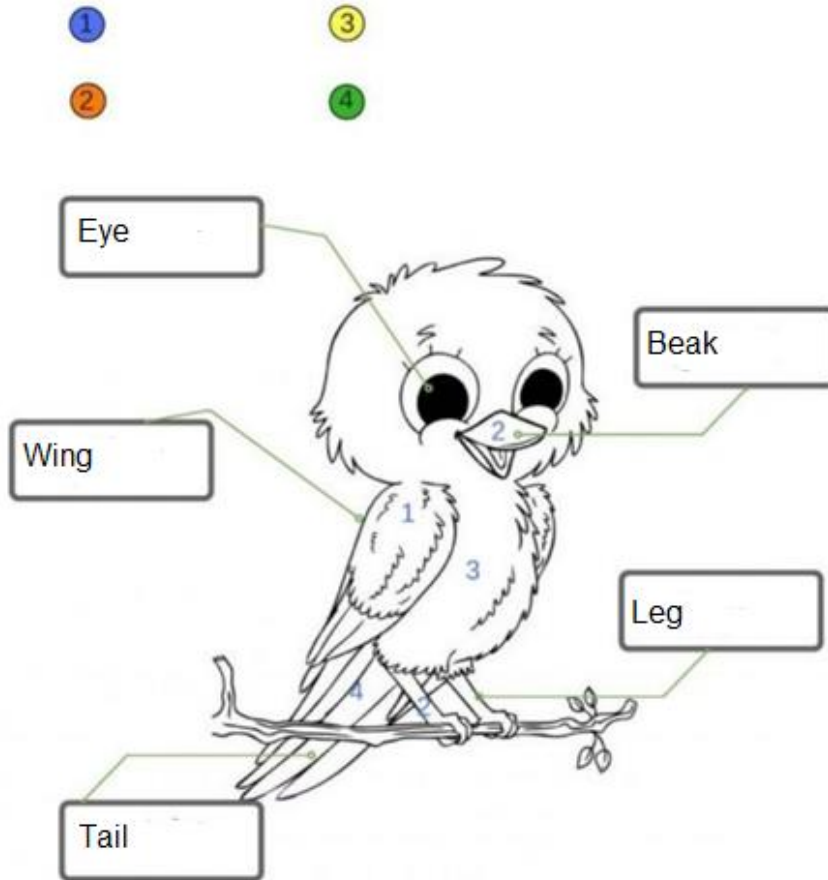


- Where is the fish in the first figure?
- What happened to the fish when it came out of the water?
- In which figure can the fish breathe?
- What is the organ that helps fish to breathe?

## Worksheet (8)

### Birds

#### a. Color and name each part of the bird:

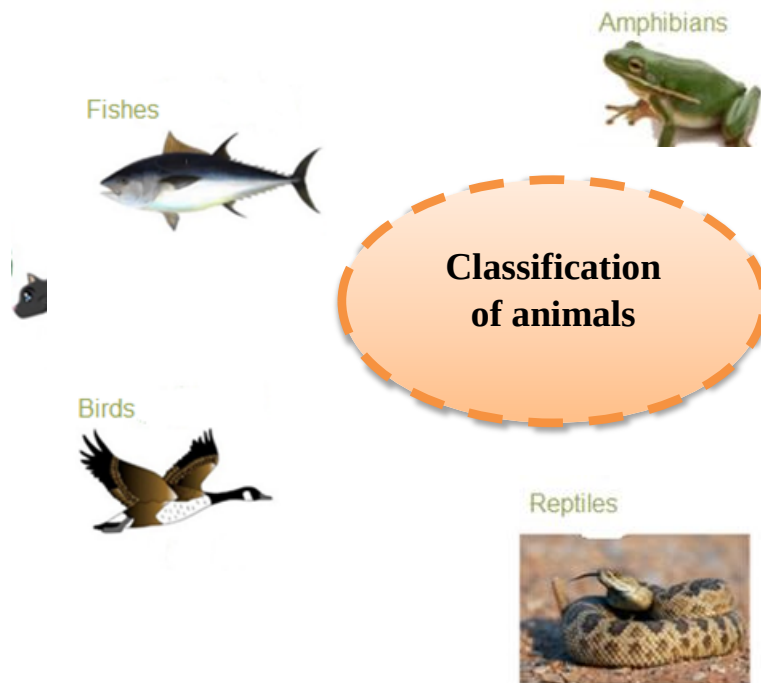


#### b. Indicate:

- What covers the body of a bird? .....
- How do birds eat? .....
- How do birds move?.....and what do they use to move? .....
- Where do birds live? .....
- What is the organ that helps birds to breathe? .....

## Slide (2)

### Kinds of animals



## Worksheet (9)

### Animal's Properties:

Complete the following table:

|                                | Mammals                                                                           | Birds                                                                             | Reptiles                                                                          | Amphibians                                                                          | Fish                                                                                |
|--------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                |  |  |  |  |  |
| Covered with :                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Have gills or lungs?           |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Have legs or fins?             |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Have wings /or no wings?       |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Live in water /on land?        |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Feed their babies or not feed? |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |

## Worksheet (10)

**Correct the mistake/s in each animal:**



Pigeon



Rabbit



Fish



Frog



Lizard

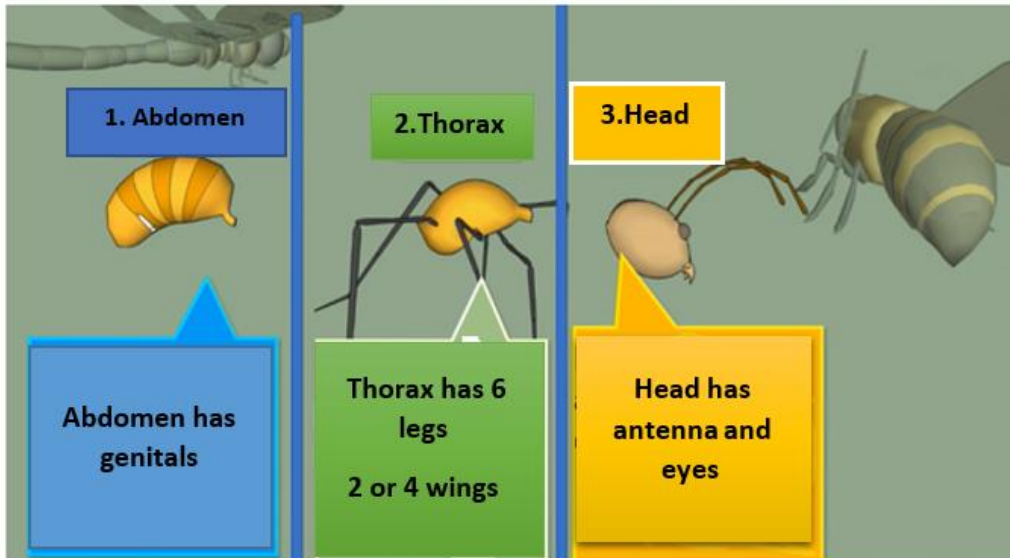
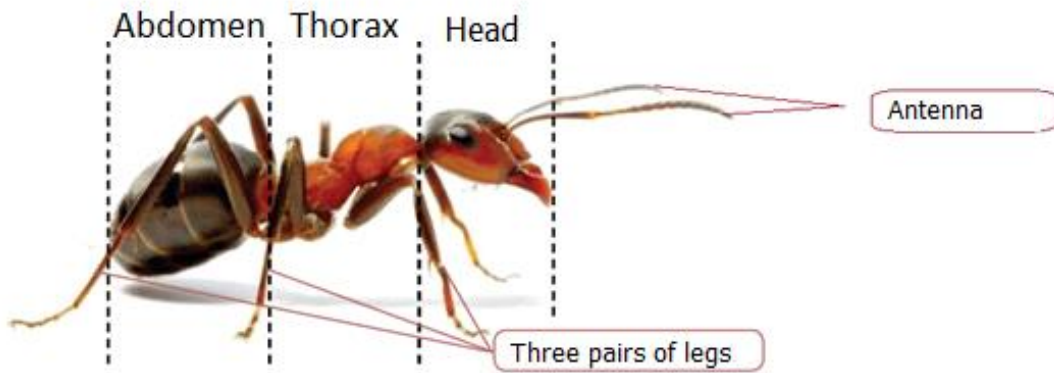


### Slide (3)





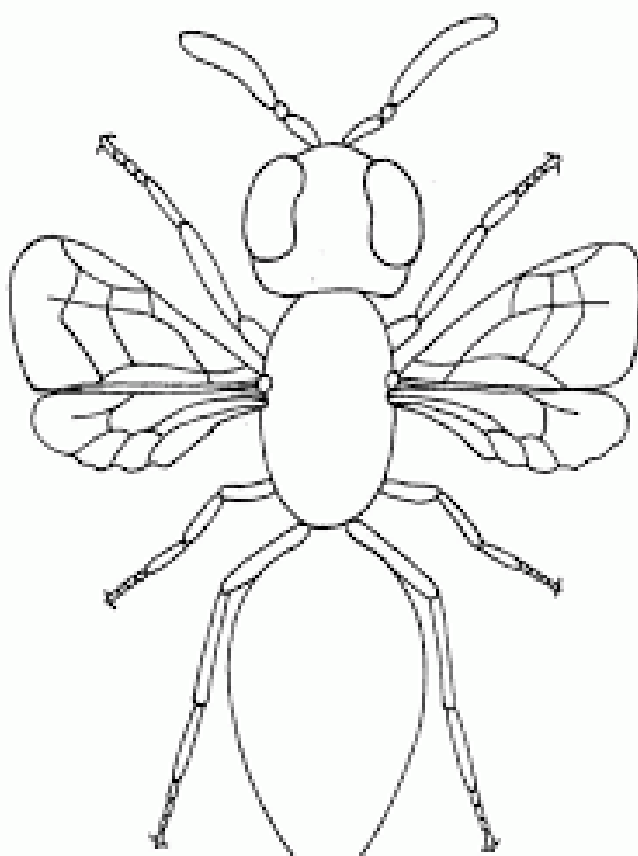
## Slide 4



## Worksheet (11)

### Parts of Insects

a. Color the abdomen with red, the thorax with blue and the head with green



b. Complete the correct sentence:

- The abdomen contains .....
- The head contains .....

- The thorax has .....

## Worksheet 1

### Learning Table

#### Topic: The plants



K

W

L

What do you know about plants?

What do you want to know about plants?

What did you learn about plants?

[illegible]

## Worksheet 2

Indicate by true or false:

| No | Statement                                                      | True | False |
|----|----------------------------------------------------------------|------|-------|
| 1  | All parts of the plant are green.                              |      |       |
| 2  | The stem is the part that lives below the surface of the soil. |      |       |

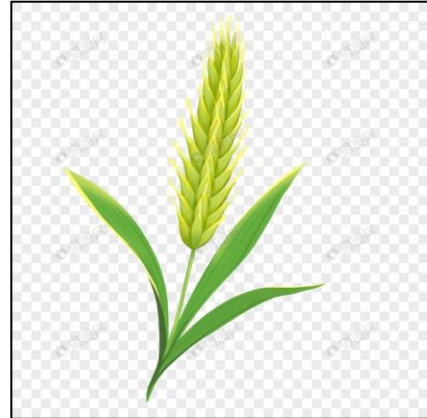


|   |                                                                                                    |  |  |
|---|----------------------------------------------------------------------------------------------------|--|--|
| ٣ | The root is the part under the soil surface.                                                       |  |  |
| ٤ | The leaf has the same shape in all plants.                                                         |  |  |
| ٥ | The leaves of the plant have different colors.                                                     |  |  |
| ٦ | The function of the stem is to carry leaves and transport water and food to the rest of the plant. |  |  |
| ٧ | The process of making food takes place in the leaves.                                              |  |  |
| ٨ | The roots stabilize the plant in the soil and absorb water and mineral salts.                      |  |  |

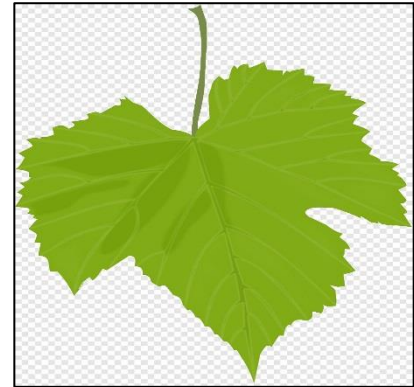
### Worksheet 3

Write the type of leaves for each plant:

Oval – Linear – Acicular - Palmate



.....



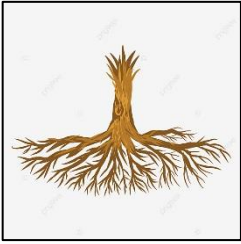
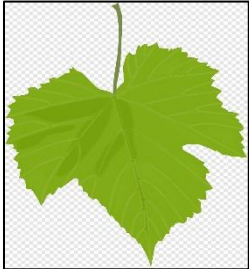
.....

## Worksheet 4

Match each part of the plant with its property:





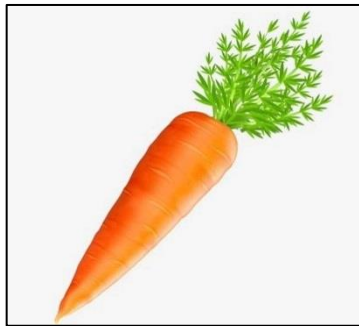
|                                                         |                                                                                     |                                     |
|---------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------|
| Makes food for plants                                   |    | Lives above the surface of the soil |
| Absorbs water and salts                                 |    | Lives below the surface of the soil |
| Transports water and nutrients to the rest of the plant |  | Holds leaves                        |

## Worksheet 5

Match each image with its appropriate root type:



Tuberous  
root



Fibrous  
root



Taproot

## Worksheet 6

Match each image with its appropriate stem type:



Stolon



Climbi  
stem

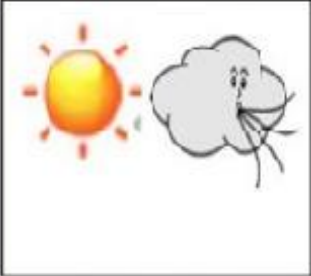
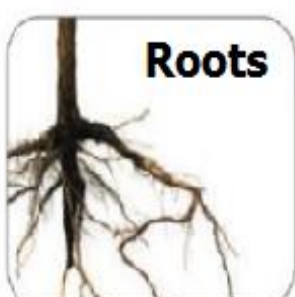


Ere  
ste

## Worksheet 7



Match each part with its function:

|                                                                                     |                                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|    | <br><b>Leaves</b>  |
|   | <br><b>Stem</b>   |
|  | <br><b>Roots</b> |

## Slide 1



| No | Question                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ١  | <p>Which of the following animals transfer pollen grains among plant flowers?</p> <div> <div>1- Bee </div> <div>2- Cat </div> <div>3- Cow </div> <div>4 - Frog </div> </div>                     |
| ٢  | <p>Which of the following animals works to aerate the soil and help the plant grow?</p> <div> <div>1- Earthworm </div> <div>2 - Spider </div> <div>3- Sparrow </div> <div>4 - Goat </div> </div> |
| ٣  | <p>Which of the following animals is used as a fertilizer for the soil?</p> <div> <div>1- Hawk </div> <div>2 - Cow </div> <div>3 – Frog </div> <div>4 - Fish </div> </div>                 |

## Worksheet 3

Cut and paste the pictures that represent the necessary needs of living things.





Necessary needs of living things



|      |           |      |       |
|------|-----------|------|-------|
|      |           |      |       |
| Toys | Sunlights | Book | Water |
|      |           |      |       |
| Home | Soil      | Air  | Food  |



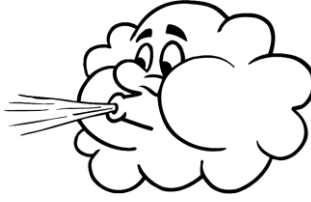
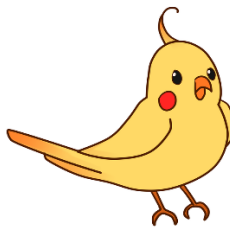
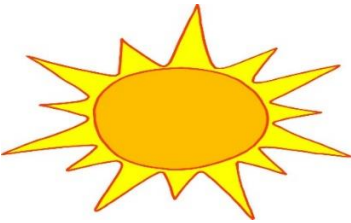
## Worksheet 4

Match each living thing with its needs.





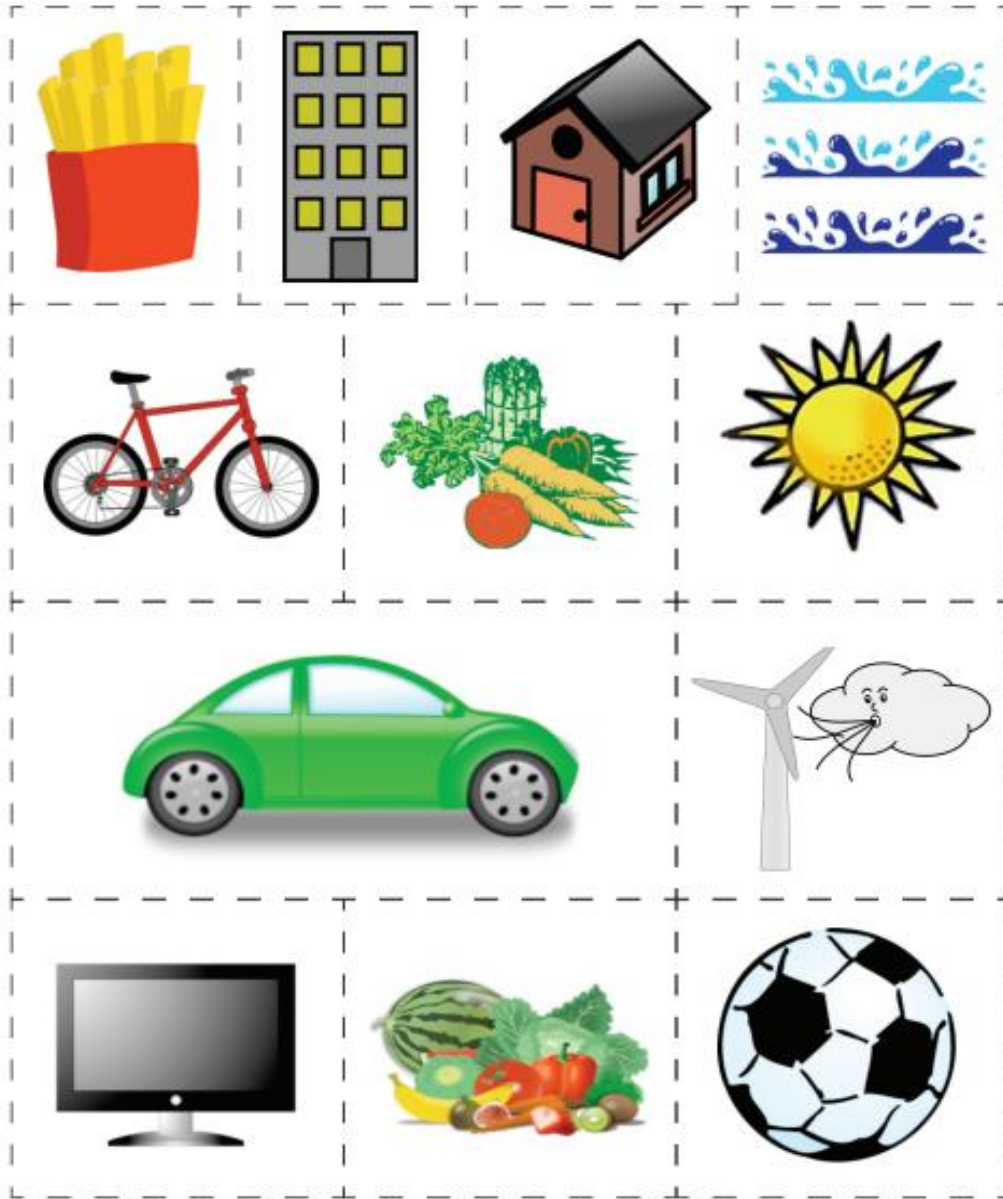


| Necessary needs                                                                                  | Living thing                                                                                        | Necessary needs                                                                               |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <br>Water       |                    | <br>Home   |
| <br>Air         |                   | <br>Food    |
| <br>Soil      |                  | <br>Nest |
| <br>Sunlights | <br>Small worm |                                                                                               |

## Worksheet 5



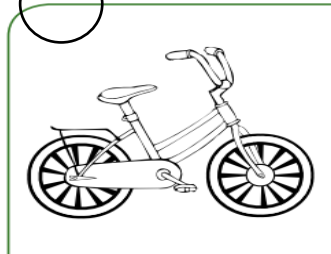
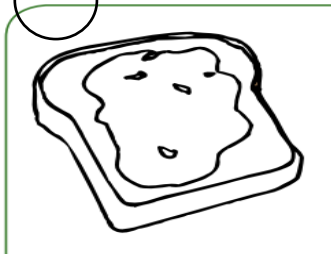
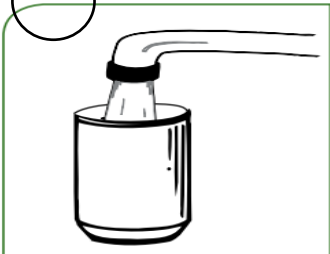
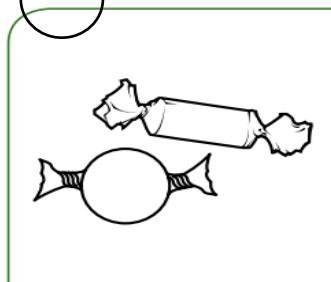
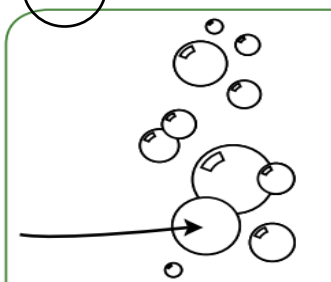
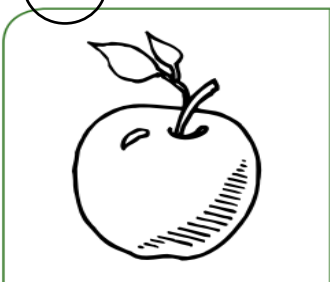
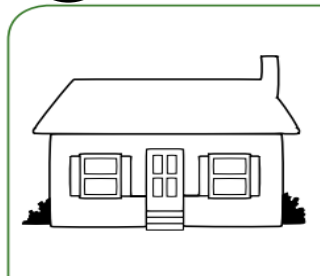
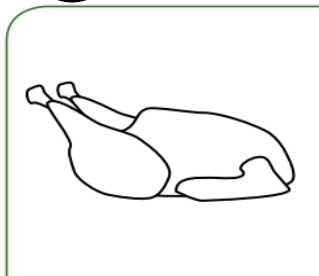
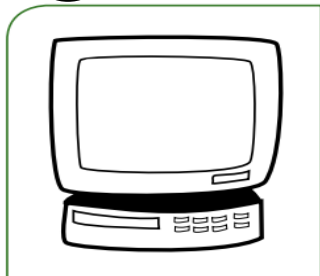
Cut and paste the following pictures on the board by classifying each if its desire or need.

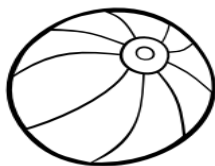


## Worksheet 6



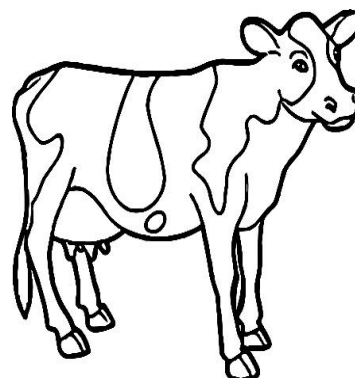
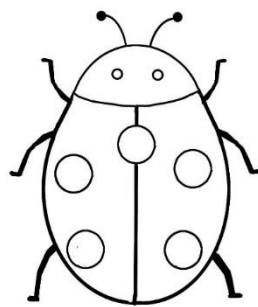
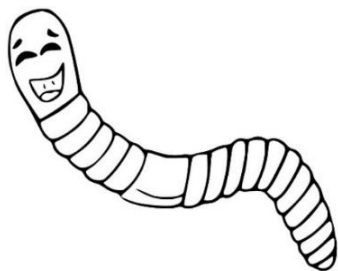
Color the circle in red if the picture represents “desire”, and in green if the picture represents “need.”





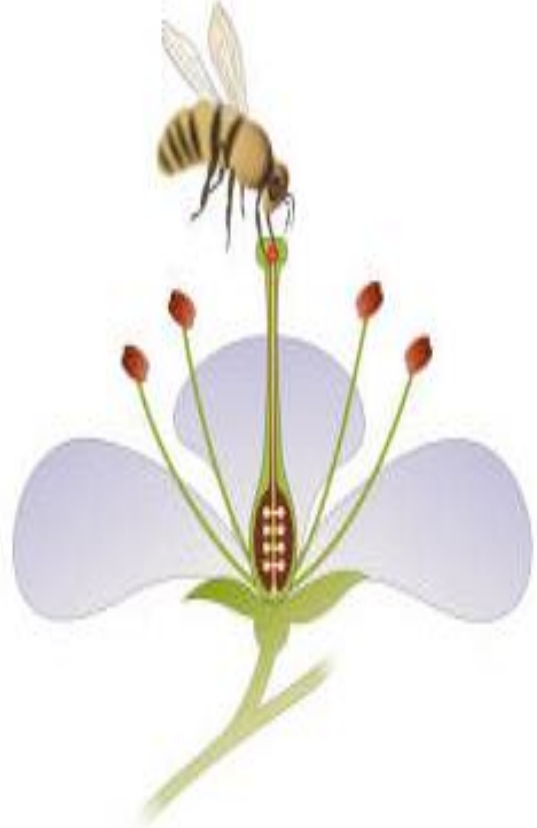
## Worksheet 7

Match each animal to its habitat.



## Worksheet 8

- 1- In the empty squares, draw an arrows representing how the bee transfers pollen grains from one flower to another.
- 2- State the importance of pollen grains for the survival of the plant.



## Worksheet 9

Put )✓( or ( × ) under the picture that represents the animals that transfer pollen grains among plant flowers for their reproduction.





( )

( )



( )

( )



( )



( )



Slide 1

# KWL Table

Topic: Water



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

## Slide 2

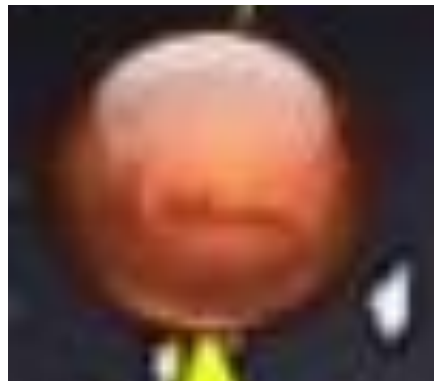
### Groups of Planets



The Earth



Jupiter



Venus



Mars



Saturn



Uranus

## Worksheet 1

### Water Purification

a. Write the observed color in each cup

| 1 | ٢ | 3 |
|---|---|---|
|   |   |   |

b. What do you observe in the bottom of each cup after heating?

1. ....
2. ....
3. ....

c. What is the shape of water in each cup?

1. ....
2. ....
3. ....

d. Which cup contains a drinking water? Why?

.....

.....

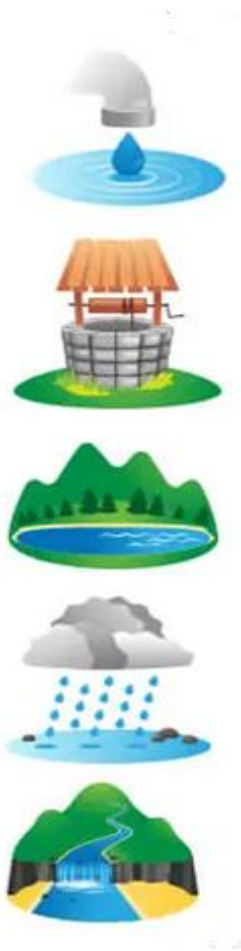
.....



## Worksheet 2

### Sources of Water

Match each source of water with its suitable picture:

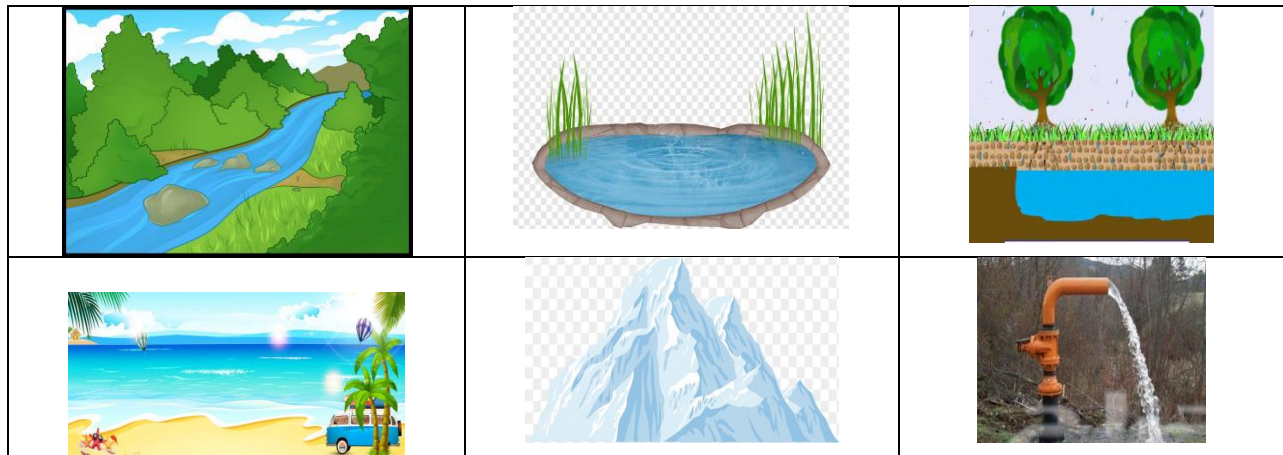


- Rain
- Rivers
- Water tap
- Water wells
- Seas

## Worksheet 3

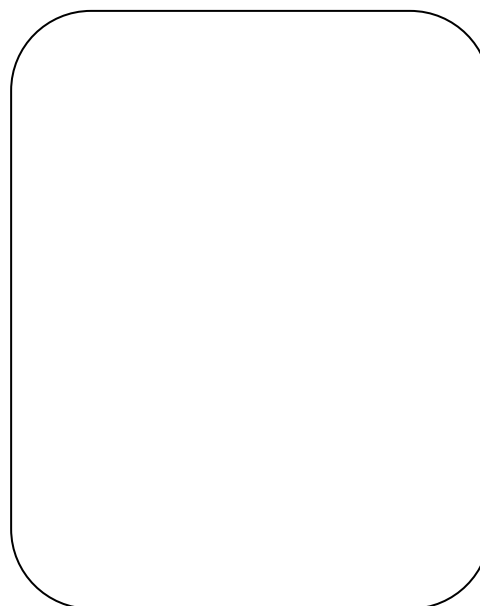
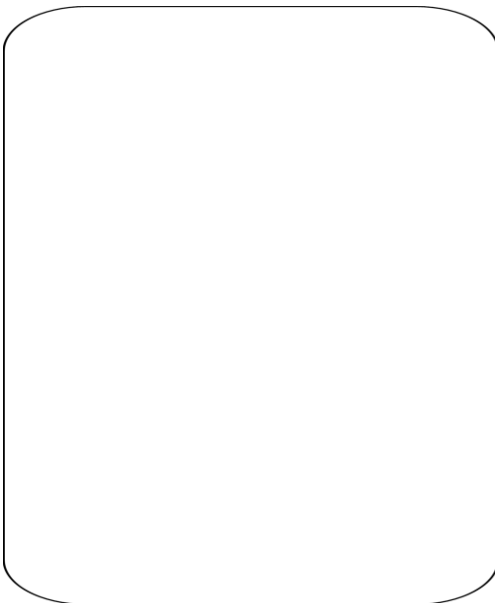
### Sources of Water

Cut and paste each picture in the appropriate place.



Ground Water

Surface water





### Slide 3

## Importance of water to living things

Spring season:

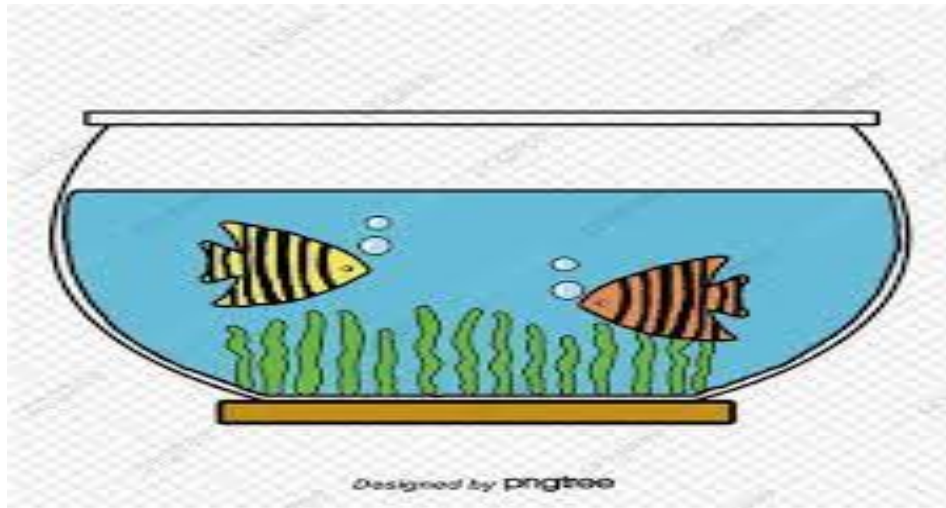


Summer season:



## Slide 4

# Importance of Water for Living Things





## Slide 5

### Living Things Need Water







## Slide 6

# The Uses of Water in Industry





## Slide 7

### Bad Habits for Using Water

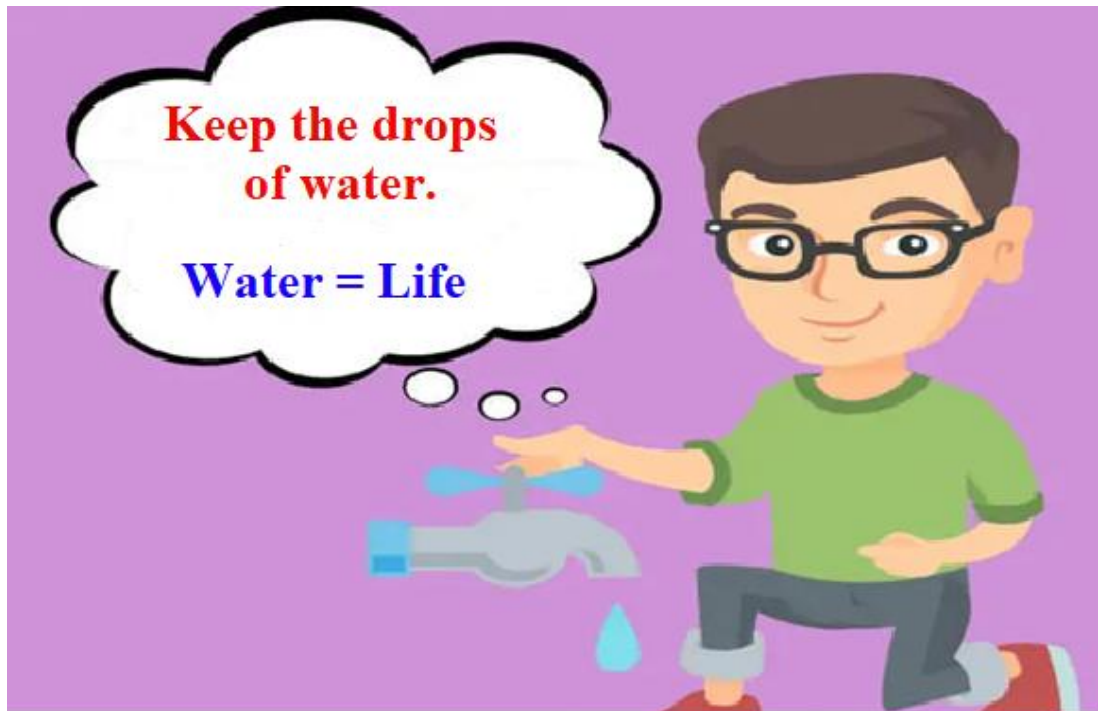
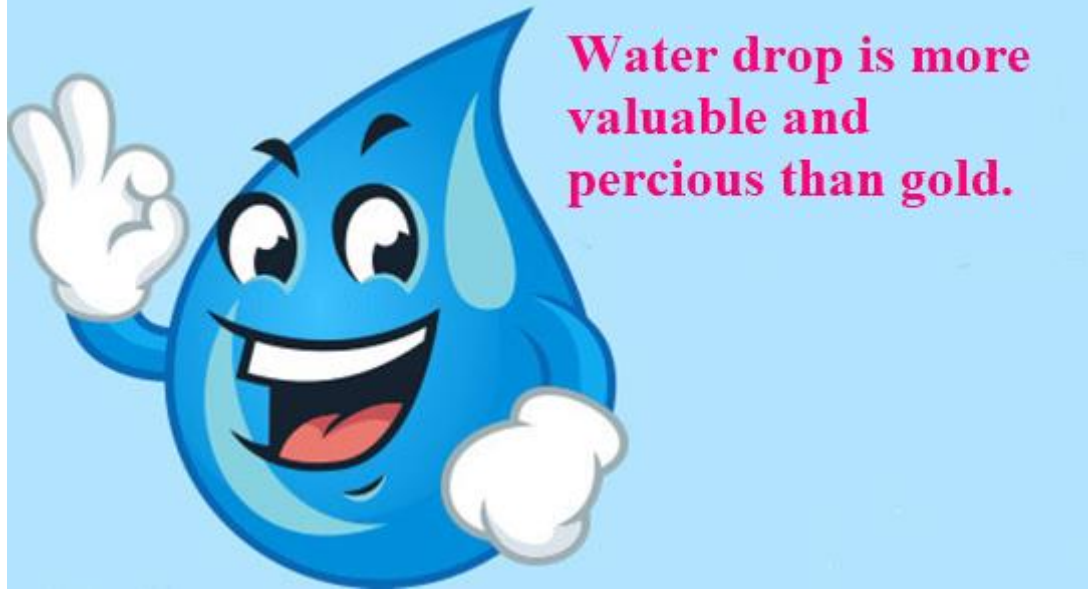




## Slide 8

## Guided Pictures and Quotes







**Water is the key of life.**

**Take care of it.**





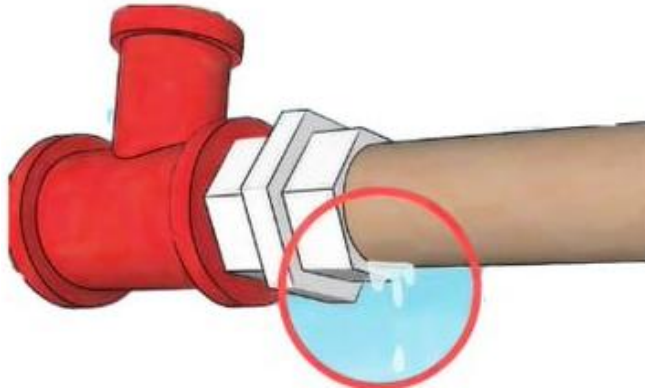
**The life continues  
with water.**





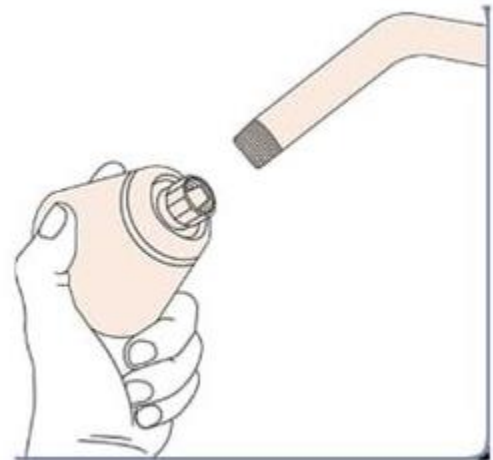
Close the water tap while washing your teeth and use a large cup instead of opening the tap.

The taps of water should be opened constantly to detect possible water leak.

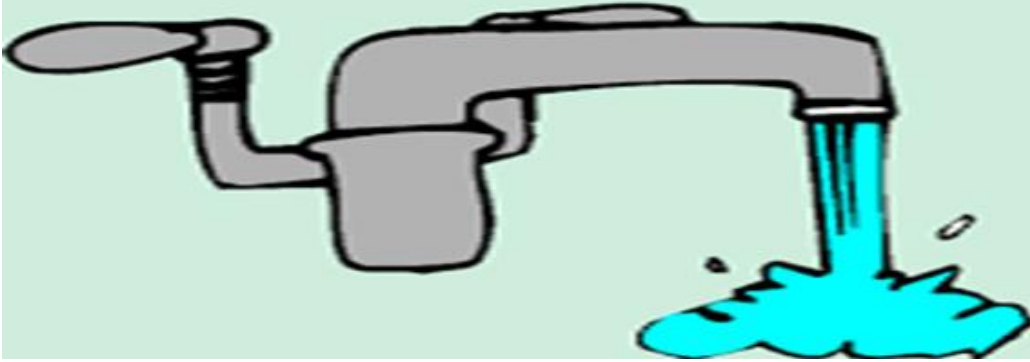


During taking a shower,  
low-flow shower heads.

use a



**Don't leave the tap of water opened.**





## Worksheet 4

### Guided Advice for the Usage of Water

Match each picture with its appropriate quote:

|                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Wash and crop the vegetables in a water basin.                                      |    |
| Water the garden during the early morning or evening to avoid evaporation of water. |    |
| Open the tap carefully                                                              |   |
| Take a shower instead of filling the tub.                                           |  |
| Make sure to close the tabs before sleeping or leaving home.                        |  |



## KWL Table

### Topic: Matter Properties and Usage



L

What did you learn about matter properties and usage?



## Worksheet 1



## Test Yourself

Cut and paste the picture in the appropriate place.

**Natural Matter**

It is matter found naturally.

طبيعية

**Manufacture Matter**

It is matter made by human using natural matter.

  
leather

  
glass

  
cotton

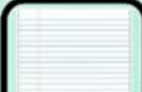
  
plastic

  
rocks

  
wool

  
rubber duck

  
metal keys

  
paper

  
wood

## Worksheet 2



## Test Yourself

Cross out the intruder from each group:

|                                                                                                                        |                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <p><b>Smooth</b></p>  <p>_____</p>    | <p><b>Shine</b></p>  <p>_____</p>   |
| <p><b>Flexible</b></p>  <p>_____</p> | <p><b>Huge</b></p>  <p>_____</p>   |
| <p><b>Red</b></p>  <p>_____</p>     | <p><b>Small</b></p>  <p>_____</p> |

## Worksheet 3

## Material Made up the Things

Cross out the intruder:

|         |                                                                                                                                                                                                                                                                                                                                                     |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wood    |              |
| Metal   |             |
| Rubber  |             |
| Plastic |     |
| Glass   |     |

### Assessment 1



Complete each sentence using the following words:

## Things

Bottle – table – dress –  
newspaper – glass ball.

## Material

Glass – Paper – Wood – Plastic –  
cotton.

This .....is made from ..... .



This .....is made from ..... .



This .....is made from ..... .



This .....is made from ..... .



This .....is made from ..... .

## Slide 2



## Natural Resource

It is the material that is made up of plants, animals, stones and soil origin in nature.





Slide 3

## Artificial Resources

It is the material that is made up by human using natural resources.



fabric



paper



glass



plastic



metal





## Assessment 2

Match the objects in column A with its source in column B:

| Column A                                                                                            |
|-----------------------------------------------------------------------------------------------------|
| <br>Aluminum Pipes |
| <br>Glass Window  |
| <br>Paper        |
| <br>Clothes      |
| <br>Plastic      |

| Column B                                                                                        |
|-------------------------------------------------------------------------------------------------|
| <br>Cotton   |
| <br>Wood    |
| <br>Petrol |
| <br>Stones |
| <br>Sand   |



## Worksheet 4

### Characteristics of Material

Choose two words from the box to describe the characteristics of each body.

Strong – smooth – Float – flexible – transparent - insulator – light – huge – rigid

.....

.....



Glass Window

.....

.....



Rubber ball

.....

.....



Woolen clothes

.....

.....



Wooden table

.....

.....



Steel spring



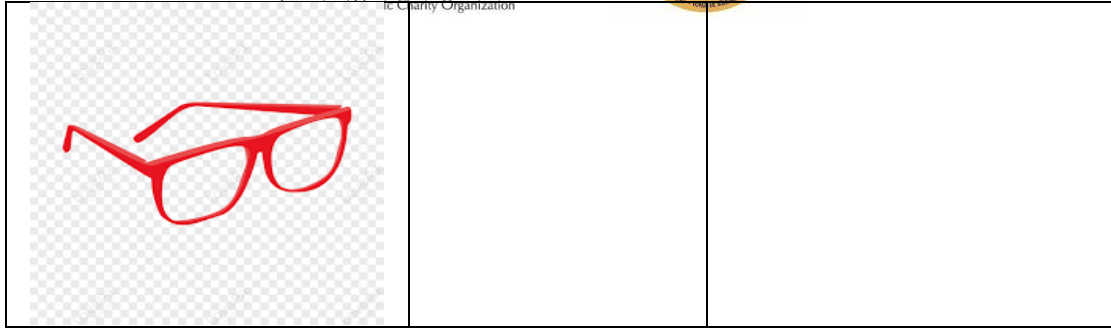
Paper box

## Slide 4

### Material Making Stuff

List the material that makes each stuff and give the reason using simple words:

| Stuff                                                                                                      | Material is made from | Reason       |
|------------------------------------------------------------------------------------------------------------|-----------------------|--------------|
| <p>Cooking Utensils</p>  | <p>.....</p>          | <p>.....</p> |
| <p>Rain Coat</p>        | <p>.....</p>          | <p>.....</p> |
| <p>Glasses</p>                                                                                             | <p>.....</p>          | <p>.....</p> |



## Slide 5

### Optimizing Properties

Using material that teacher distributed in order to improve feature for each material obtained in the below table:

| Material to be improved | Feature     | Required materials                      | Method                                                             |
|-------------------------|-------------|-----------------------------------------|--------------------------------------------------------------------|
| Paper                   | Endurance   | Newspaper                               | Fold it as cylinder                                                |
| Skins                   | Flexibility | Piece of skin – hammer with rubber head | Knock on a piece of skin using hammer with rubber head many times. |
| Cotton                  | Endurance   | Cotton – Spindle                        | Use spindle to spin cotton in order to make it fiber.              |



قوتين



مسروع بناء برا

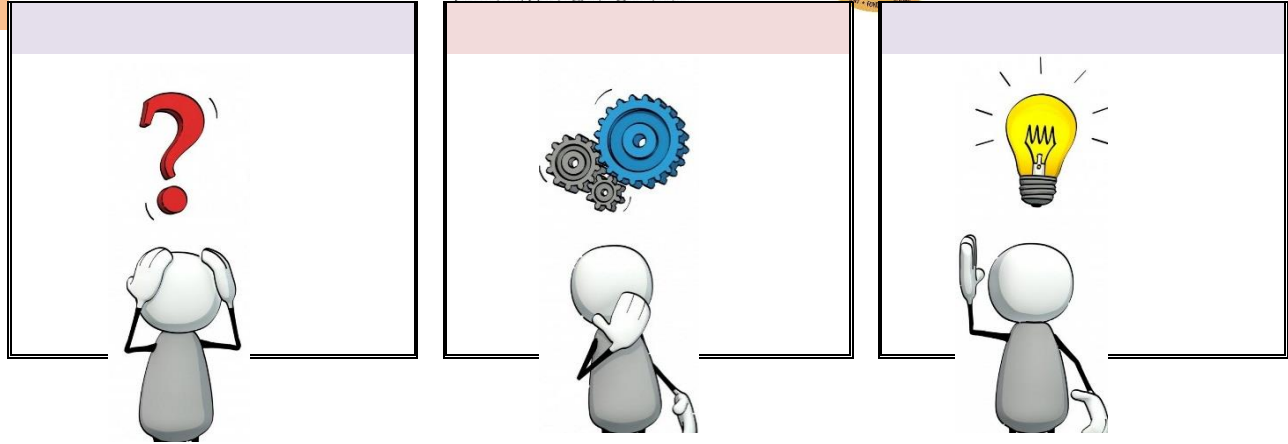
Slide (1)

**KWL Table**

**Topic: Force and its effect**



| K                                            | W                                                    | L                                               |
|----------------------------------------------|------------------------------------------------------|-------------------------------------------------|
| What do you know about force and its effect? | What do you want to know about force and its effect? | What did you Learnt about force and its effect? |
|                                              |                                                      |                                                 |



## Worksheet 1

### Types of Force

Write the type of force under each picture:

|                |                |              |                       |
|----------------|----------------|--------------|-----------------------|
| Air resistance | Gravity Force  | Pull Force   | Magnetic Force        |
| Applied Force  | Friction Force | Spring Force | Float Force (Buoyant) |



















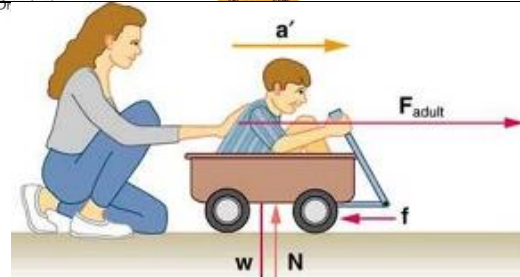

## Worksheet 2

### Change of Force

Complete the following:

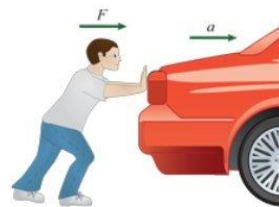
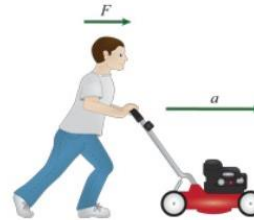
What happens when the force is increased?

Increase ..... and the .....will increase.



What happens when body mass is increased?

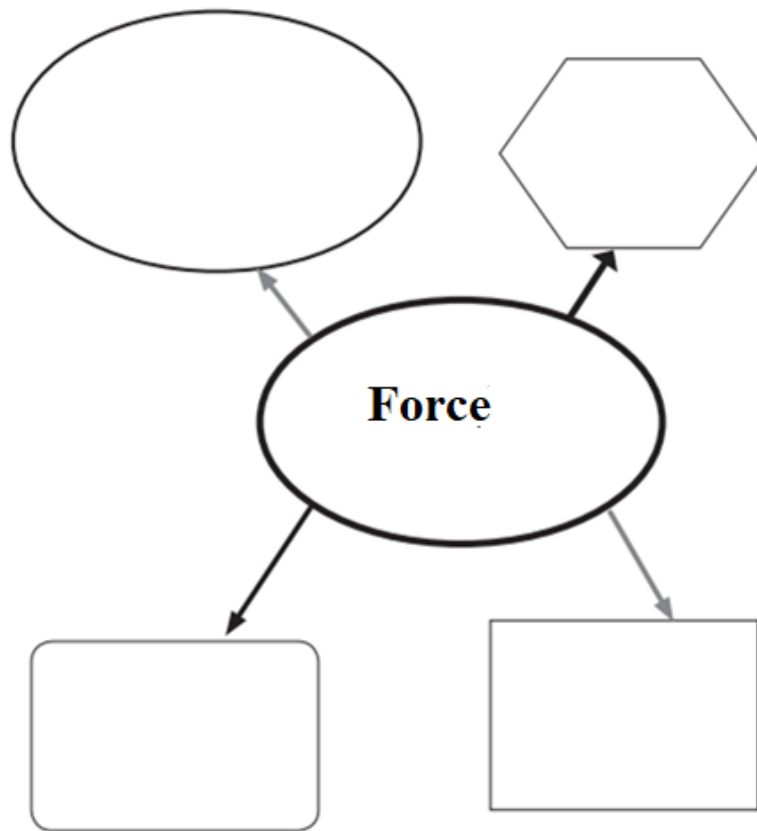
You should increase ..... to move your body.



## Slide 2

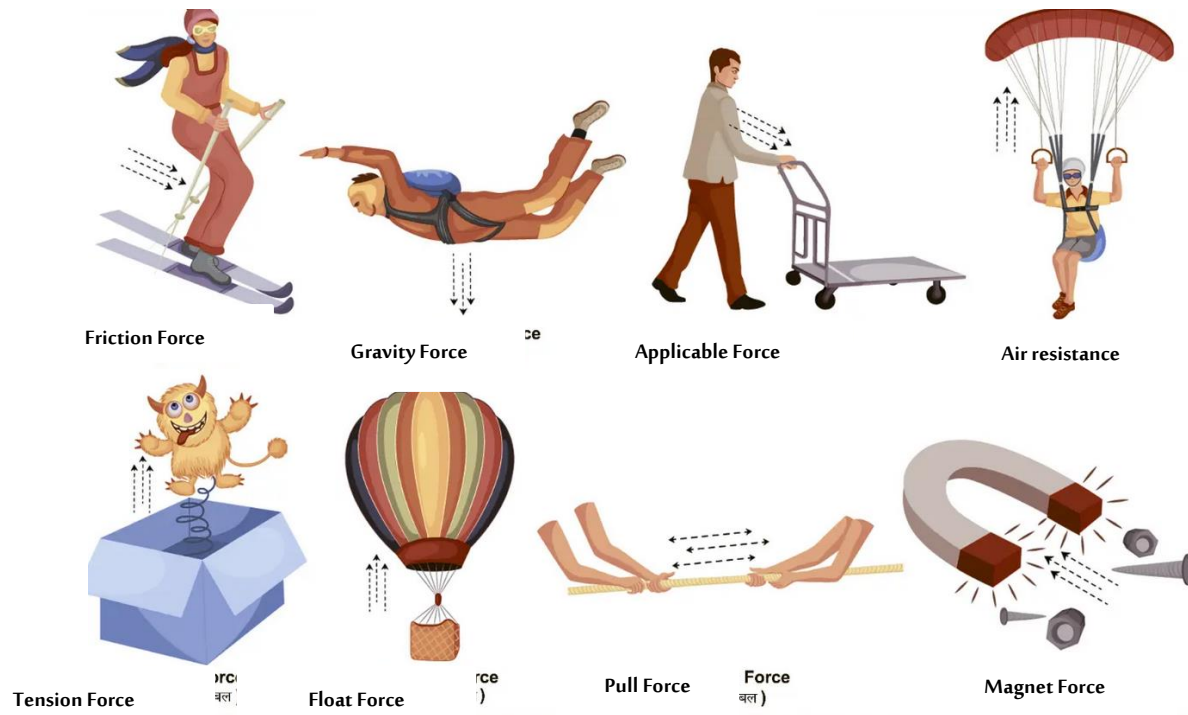
## Force

Observe the picture then describe the ball using suitable words:



Slide 3

**Observe and Describe**



### Worksheet 3

## Exploring Tension Force

Listen to the activity steps that your teacher presents then apply them, Write your notes in the empty spaces:



| Force | Effect                |
|-------|-----------------------|
| ..... | Elongation of spring  |
| ..... | Compression of spring |

## Slide 4

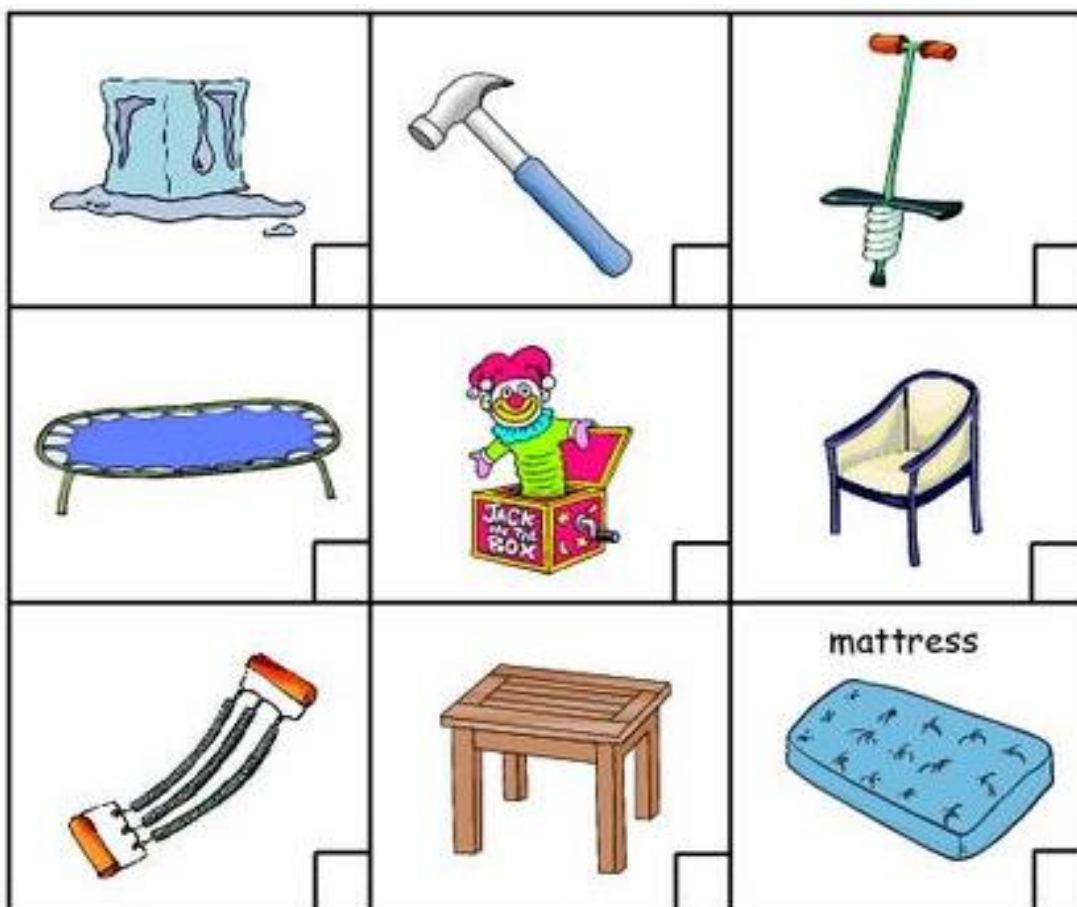
## Uses of Spring



## Assessment 1



Put (✓) in front of the object that uses a spring:



## Worksheet 4

## Force and Distance

Follow activity steps - under teacher supervision- then write notes and conclude:



| Number of students that push the basket | Distance that basket moved |
|-----------------------------------------|----------------------------|
| 1                                       | .....                      |
| 2                                       | .....                      |
| 3                                       | .....                      |

To conclude with: as force is increased on the body distance.....

## Worksheet 5

### Force and Mass

Follow activity steps - under teacher supervision- then write notes and conclude:



| Number of books | Force needed<br>( balance reads) |
|-----------------|----------------------------------|
| 1               | .....                            |
| 2               | .....                            |
| 3               | .....                            |

## Assessment 2

Cut and paste pictures in the appropriate place.



| Easy to Move | Hard to Move |
|--------------|--------------|
|              |              |



## Final Assessment

Match each Picture with the force it describes:

Column A



Column B

- Gravitational Force

- Magnetic Force

- Wind Force

- Water Current

## Slide 1

## Learning Table

## Topic: The Magnetic Force.



| K                                                                                   | W                                                                                   | L                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| What do you know about the magnetic force?                                          | What do you want to know about magnetic force?                                      | What did you know about the magnetic force?                                           |
|  |  |  |

Slide 2

## Diagnosis Assessment

Indicate by true or false.



| No | Statement                                                                                                                     | True | False |
|----|-------------------------------------------------------------------------------------------------------------------------------|------|-------|
| 1  | Copper and aluminum are attracted to magnets; So they are magnetic materials.                                                 |      |       |
| 2  | The force of a magnet passes through materials made of iron.                                                                  |      |       |
| 3  | The force of the magnet does not pass through materials made of glass.                                                        |      |       |
| 4  | The North Pole can be separated from the South Pole by cutting the magnet in halves.                                          |      |       |
| 5  | The magnetic force is distributed on one plane only.                                                                          |      |       |
| 6  | Magnetism only causes materials to be attracted to each other (students do not take into account repulsion due to magnetism). |      |       |
| 7  | The magnetic and geographical poles of the Earth are located in the same side.                                                |      |       |



## Worksheet 1

### Transmission of Magnets

Below are pictures of a group of objects, decide through which the magnetic force is transmitted:



Plastic

Transmitted

Not transmitted



Clothes

Transmitted

Not transmitted



Glass

Transmitted

Not transmitted



Sheet

Transmitted

Not transmitted



Water

Transmitted

Not transmitted



Wood

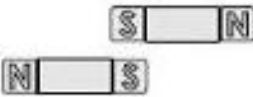
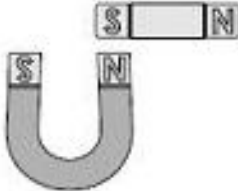
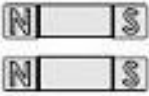
Transmitted

Not transmitted

## Worksheet 2

### Attraction or Repulsion?

Indicate the type of force in each case (attraction or repulsion):

|                                                                                                               |                                                                                                               |                                                                                                                |
|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
|  <p>attract      repel</p>   |  <p>attract      repel</p>   |  <p>attract      repel</p>   |
|  <p>attract      repel</p>   |  <p>attract      repel</p>   |  <p>attract      repel</p>   |
|  <p>attract      repel</p> |  <p>attract      repel</p> |  <p>attract      repel</p> |

### Worksheet 3

## Magnetic Permeability

Perform the experiment and write down your notes in the table.



| Matter       | Examples | Does the magnetic force pass through it? |       |
|--------------|----------|------------------------------------------|-------|
|              |          | Yes                                      | No    |
| Not magnetic | Sheet    | .....                                    | ..... |
|              | Plastic  | .....                                    | ..... |
|              | Glass    | .....                                    | ..... |
|              | Aluminum | .....                                    | ..... |
|              | Copper   | .....                                    | ..... |
|              |          |                                          |       |
| Magnetic     | Iron     | .....                                    | ..... |
|              | Nickel   | .....                                    | ..... |
|              | Cobalt   | .....                                    | ..... |



## Worksheet 4

### Magnetic Force Distribution

Follow the procedure by your teacher to answer the following questions:

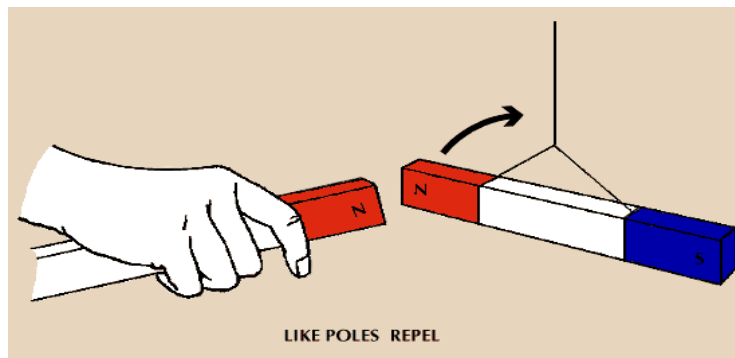
1. Where is the largest amount of iron filings attracted along the magnet? .....
2. Where does the amount of iron filings decrease along a magnet? .....
3. Draw the distribution of iron filings on the surface of the magnet using the following figure:



## Worksheet 5

### Law of Attraction and Repulsion

Complete the table below according to your observations (repulsion or attraction):



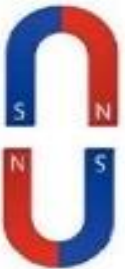
| Magnet mode | Repulsion or Attraction |
|-------------|-------------------------|
|             | _____                   |
|             | _____                   |
|             | _____                   |
|             | _____                   |



## Final Assessment 2

### Repulsion or Attraction

Complete with the word "repulsion" or "attraction" in front of each of the following cases:

|                                                                                     |   |                      |
|-------------------------------------------------------------------------------------|---|----------------------|
|    | → | <input type="text"/> |
|    | → | <input type="text"/> |
|    | → | <input type="text"/> |
|  | → | <input type="text"/> |
|  | → | <input type="text"/> |
|  | → | <input type="text"/> |

## Final Assessment 2

Complete the following concept map using one of the following statements:

The force of the magnet is concentrated at the poles

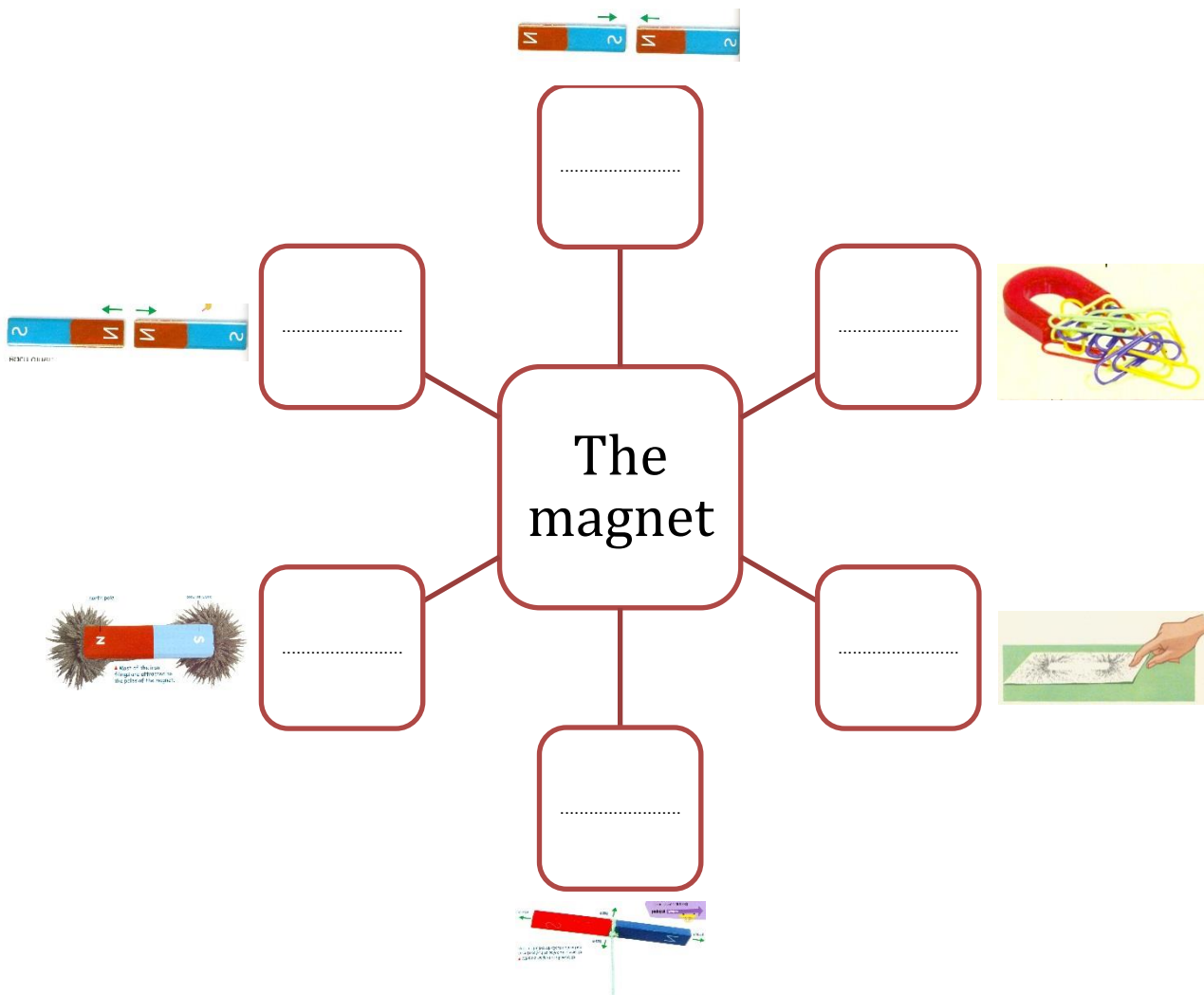
Indicates the north direction when it is free to move

Like poles repel each other

Its strength passes through non-magnetic materials

Attracts magnetic materials

Different poles attract each other



Slide 1

Learning Table (KWL)

Topic: The Sound

| K                             | W                                     | L                               |
|-------------------------------|---------------------------------------|---------------------------------|
| What do you know about sound? | What do you want to know about sound? | What did you learn about sound? |
|                               |                                       |                                 |



## Worksheet (1)



### Loud Sounds and Soft Sounds

Write (L) under the objects that give loud sounds and (S) under the objects that give soft sound and (X) under the objects that don't give a sound.





## Worksheet (2)

### Voice Classification by Pitch

Classify the following sounds according to their pitch by writing the letter (H) for high pitched sounds and the letter (L) for low pitched sounds.

|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |



Indicate by true or false.

| No | Statements                                                      | True | False |
|----|-----------------------------------------------------------------|------|-------|
| 1  | It produces sound from acoustic cords.                          |      |       |
| 2  | The voice of ladies is one of the low pitched sounds.           |      |       |
| 3  | The sound of the cow is a high pitched sound.                   |      |       |
| 4  | Sounds can be seen and heard.                                   |      |       |
| 5  | There is no need to care about hearing loss for young children. |      |       |
| 6  | Sound becomes quieter as it moves farther.                      |      |       |
| 7  | When the sound moves it loses its energy.                       |      |       |
| 8  | Sound travels in vacuum.                                        |      |       |
| 9  | Sound can be physically touched.                                |      |       |
| 10 | Older man voice is a loud sound.                                |      |       |
| 11 | Hearing ability can be restored after losing it.                |      |       |
| 12 | The sound is louder on the day than at night.                   |      |       |
| 13 | High noise appears when exposed to it for prolonged periods     |      |       |
| 14 | Sound travels in the air and does not travel in the water.      |      |       |





## Worksheet (4)

### Sound Sources

Draw a circle around images that represent sound sources.



## Worksheet (4)

### Noise Causes

Circle sources that make noise.



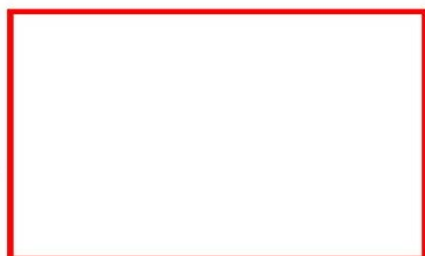
## Worksheet (5)

### Voice Differentiation

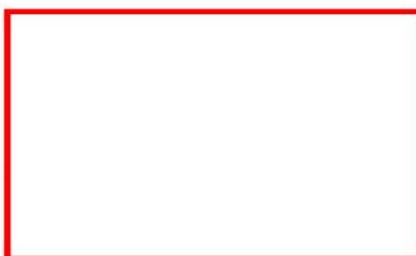
Listen to the sounds in front of the following boxes and then drag the image that represents each sound



1.



2.



3.



4.



5.



## Worksheet (6)

### Source Classification by Audio Release

Mark (√) below the objects that make a sound and mark (×) below the objects that do not make a sound:

























## Worksheet (7)

### Sources of Sounds

Classify the following sources of sound into natural and artificial sources (i.e. man-made) by cutting and gluing the image in place in the table, whether natural or artificial.

| Natural Sources | Artificial Sources |
|-----------------|--------------------|
|                 |                    |



## Worksheet (8)

### Sources of Sounds

Classify the following sources of sound as sources originating from animals or birds by writing code A and human-made sources by writing code H and sources of natural phenomena by writing code P

|                                                                                                                |                                                                                                            |                                                                                                        |
|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Lion sound<br>                | Airplane sound<br>        | Car sound<br>       |
| Bell sound<br>               | Waterfalls sound<br>     | chicken sound<br>  |
| Piano sound<br>             | Wind sound<br>          | Phone sound<br>   |
| volcanic eruption sound<br> | Dog barking sound<br>   | clock ticking<br> |
| Water waves sound<br>       | Children game voice<br> | Casette sound<br> |





## Worksheet (9)

### Sounds of Musical Instruments

Circle the instrument that represent the sound.

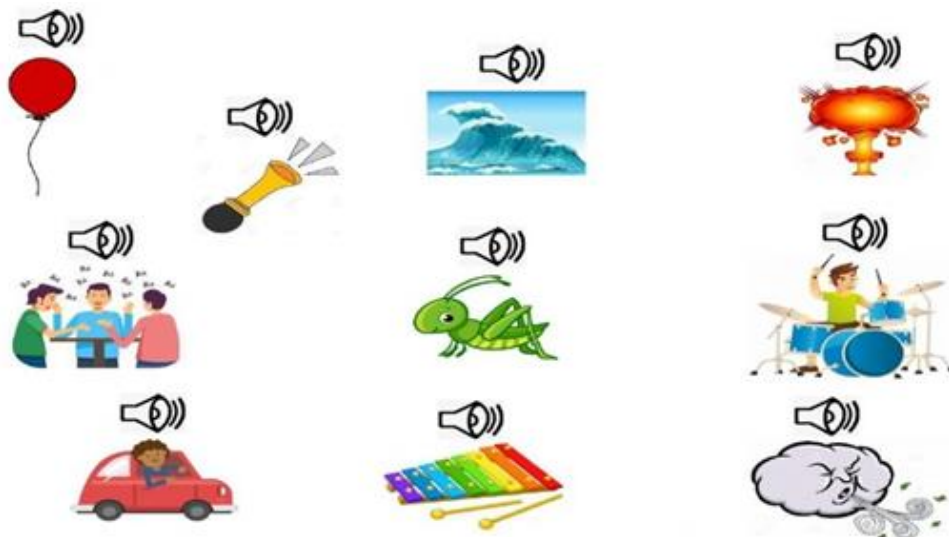


|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Worksheet (10)

### Sounds that Cause Noise

- 1- Indicate the objects that cause noise
- 2- Cut and paste each picture in the appropriate place.



| Noise | Voice | Music |
|-------|-------|-------|
|       |       |       |



## Slide 1

### Learning Table

#### Topic - Heat Sources and their Uses

| What do you know about the heat sources?                                                                                                                                                                                                                                                       | What do you want to know about the heat sources?                                                                                                                                                                                                                                               | What did you learn about the heat sources?                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div style="background-color: #fff9c4; height: 300px; border: 1px solid black; position: relative;"> <div style="position: absolute; bottom: 0; right: 0; width: 100px; height: 100px; background: white; border: 1px solid black; text-align: center; vertical-align: middle;"> </div> </div> | <div style="background-color: #ffe0b2; height: 300px; border: 1px solid black; position: relative;"> <div style="position: absolute; bottom: 0; right: 0; width: 100px; height: 100px; background: white; border: 1px solid black; text-align: center; vertical-align: middle;"> </div> </div> | <div style="background-color: #fff9c4; height: 300px; border: 1px solid black; position: relative;"> <div style="position: absolute; bottom: 0; right: 0; width: 100px; height: 100px; background: white; border: 1px solid black; text-align: center; vertical-align: middle;"> </div> </div> |



## Worksheet 1

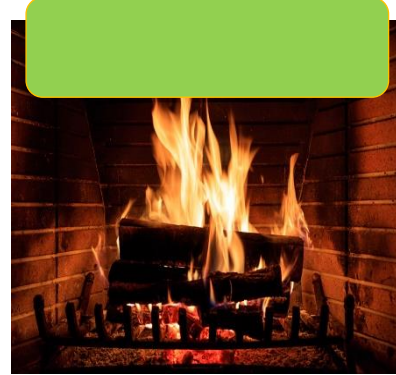
Indicate which statement is true and which is false:

| No | Phrase                                                                     | True | False |
|----|----------------------------------------------------------------------------|------|-------|
| ١  | Cold bodies do not contain heat.                                           |      |       |
| ٢  | Heat and cold are completely different.                                    |      |       |
| ٣  | Substances that have a higher temperature contain a higher amount of heat. |      |       |
| ٤  | Heat can be transferred from cold objects to hot objects.                  |      |       |
| ٥  | The heat is only transmitted to the top.                                   |      |       |
| ٦  | Boiling is the highest temperature a substance can reach.                  |      |       |
| ٧  | The steam produced by boiling water is easy to see.                        |      |       |
| ٨  | The heat in our homes is used to cook food and heat water only.            |      |       |
| ٩  | Electricity has no thermal effect.                                         |      |       |
| ١٠ | Flames and natural gas are the only industrial source of heat.             |      |       |

## Worksheet 2

### Hot Objects and Cold Objects

Decide which is a hot object, and which is a cold object.





### Worksheet 3

## The Effect of Heat on Bodies

Predict what will happen to the following objects when heat affects



them.

Freezing

Melting

Fusion



Ice

Water

Gas

Liquid



1. When you heat pieces of chocolate on a fire, they.....



2. When you put a quantity of lemon juice in the freezer, it.....

3. When a candle is lit, the fire will help the ..... of the candle.

4. When you put water in the freezer, it turns into.....



5. When a quantity of water is heated over a flame, it turns into .....

## Worksheet 4

### Heat Transfer

Answer the following questions:



spoon and a cup of tea?

Which of the following words describe the

temp  
eratu  
re of  
a

|   | Temperature of the spoon | Temperature of the cup of tea |
|---|--------------------------|-------------------------------|
| 1 | decreases                | Increases                     |
| 2 | Remains constant         | Decreases                     |
| 3 | increases                | Decreases                     |
| 4 | increases                |                               |



2. Ayman put a bottle of cold milk in a bowl containing hot water. Predict what will happen.

Milk temperature increases

Milk temperature decreases

Milk temperature remains constant

3. When a metal straw is placed in a glass of iced juice, its temperature decreases. Which of the following statements explains what happened?



Heat is transferred from juice to straw

transfe

w

Worksheet 5

Heat Sources around Us

Indicate which of the following pictures is a source of heat around us.





Slide 2

## Boiling of Water



Listen to  
the  
dialogue  
that  
takes

mother.

place between Mariam and her



**Mariam.** Good morning mom.

**Mother .** Good morning, Mariam.

**Mariam.** What are you doing mom?

**Mother .** I heat up the water for lunch.

**Mariam.** Mom, I watched in one of the videos that what rises when water is heated, is called water vapor.

**Mother .** Honey, water vapor is a gaseous state of water that we cannot see, and what we see rising when water is heated is an amount of vapor that condenses into water when cooled in air.

**Mariam.** How can we know, Mom, what is rising ?

**Mother .** By bringing a metal cap to boiling water, we find liquid water on the surface of the cap.

**Mariam.** So, my mother, when boiling water and rising vapor, this is the highest temperature that water can reach.

**Mother . Yes,** Mary, after the water reaches 100 degrees Celsius and we continue heating, the water begins to evaporate until it turns into steam.

**Mariam .** So, mom, evaporation and boiling happen to water.

**Mother:** Yes, Mariam , let's go to prepare the meal.

**Mariam.** Alright mom, I'm going to prepare it.



## Worksheet 6

### Boiling of Water

Answer the following questions:

1. The misconception that Mariam had about boiling water.

.....  
.....

2. Water happens: .....

Evaporation  
and melting

Boiling and  
evaporation

Boiling and  
sublimation

Melting  
and boiling

3. The temperature of the water upon boiling is.....

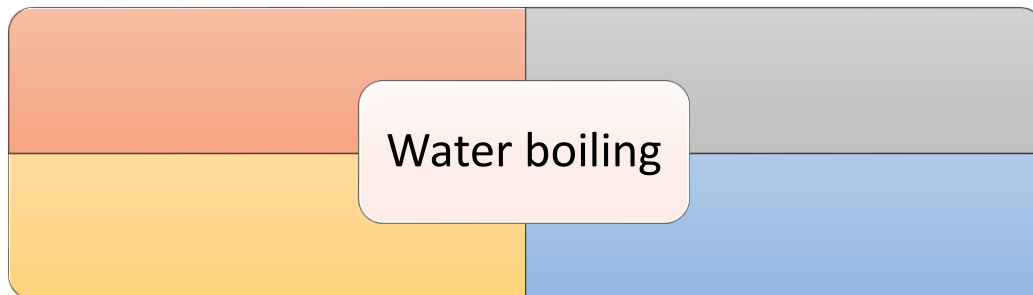
٢٠٠  
degrees

50  
degrees

100  
degrees

150  
degrees

4. In light of what you have learned from the dialogue, use the simple set of words for boiling water.



## Worksheet 7

### Uses of Heat in our Life

After watching the video, write the uses for each source.

|                          |       |
|--------------------------|-------|
| Household gas stove      | ..... |
| Shower heater            | ..... |
| Iron for ironing clothes | ..... |
| electric kettle          | ..... |
| microwave                | ..... |
| the heater               | ..... |
| Ironer                   | ..... |

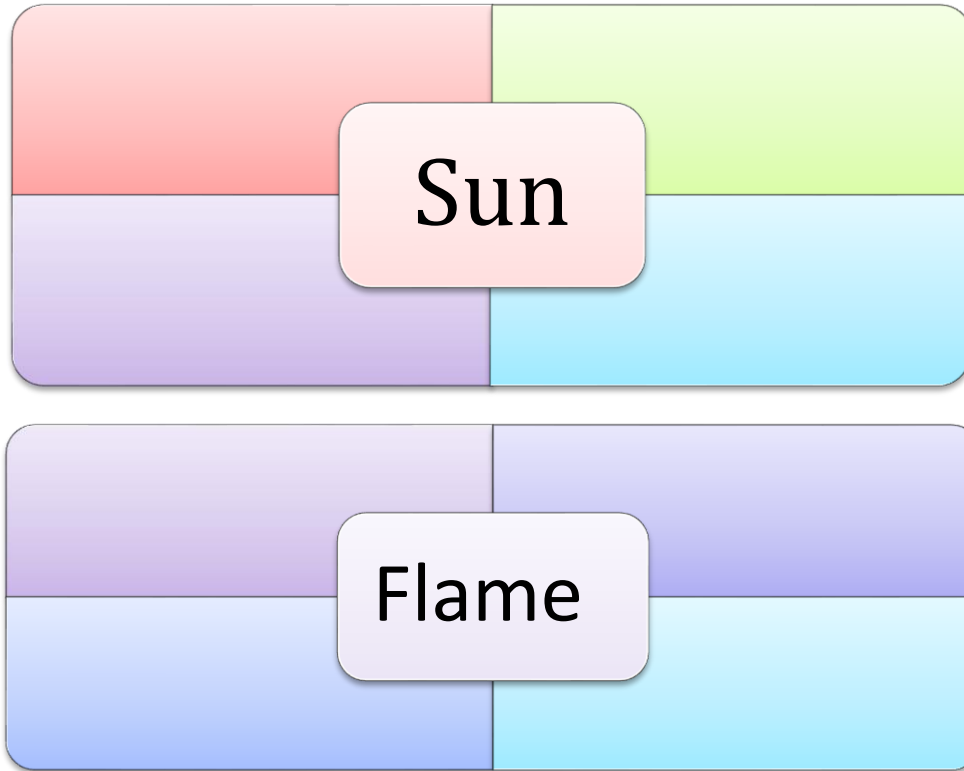




## Worksheet 8

### Life Examples of the Uses of Heat around Us

According to your acquired knowledge , give the importance of the heat produced in each case.





Friction