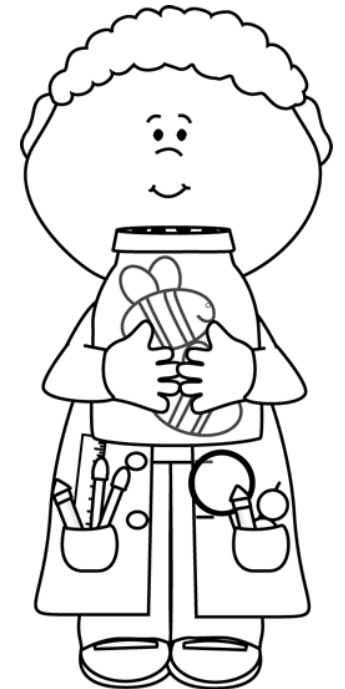


# Science Notes

## P3 Diversity

### Living Things



# What are living things?

- Living things are things that

## Need

- Air
- Food
- Water

## Can

- Grow
- Reproduce
- Respond to changes

# What are non-living things?

- Non-Living things are things that

**Do not need**

- **Air**
- **Food**
- **Water**

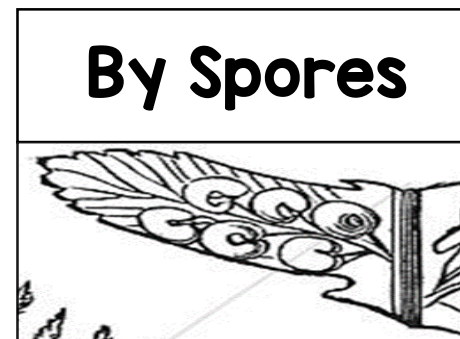
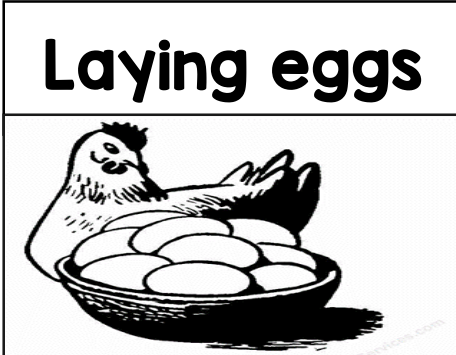
**Cannot**

- **Grow**
- **Reproduce**
- **Respond to changes**

# Living Things reproduce

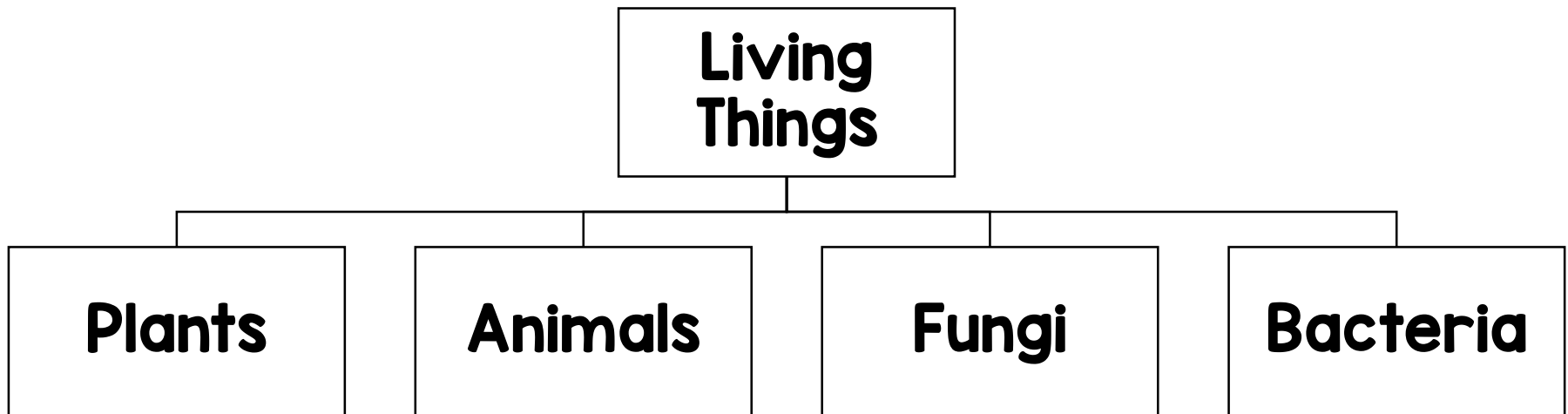
- Through different ways

## Examples



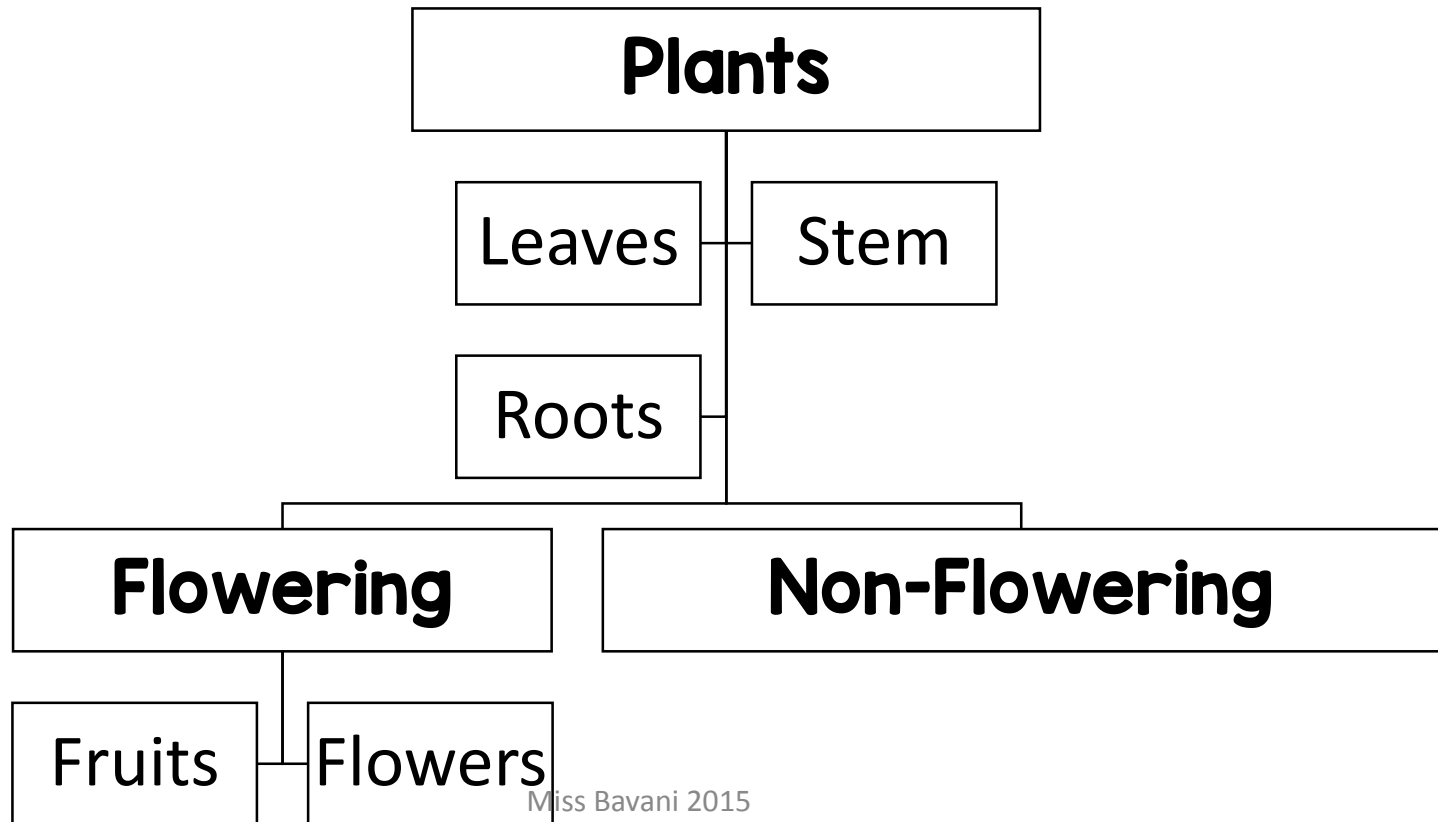
# How can Living Things be classified?

- Living things can be grouped further into 4 main groups.



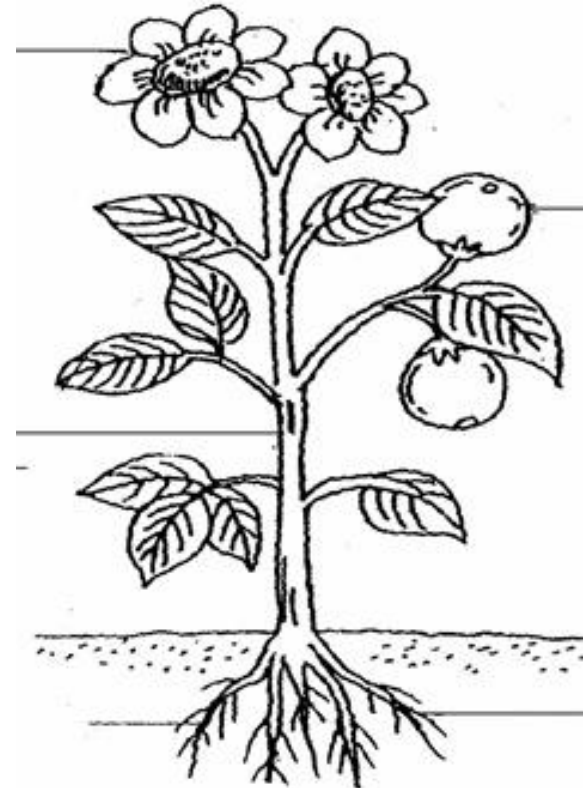
# What are plants?

- **Plants are living things that make their own food.**



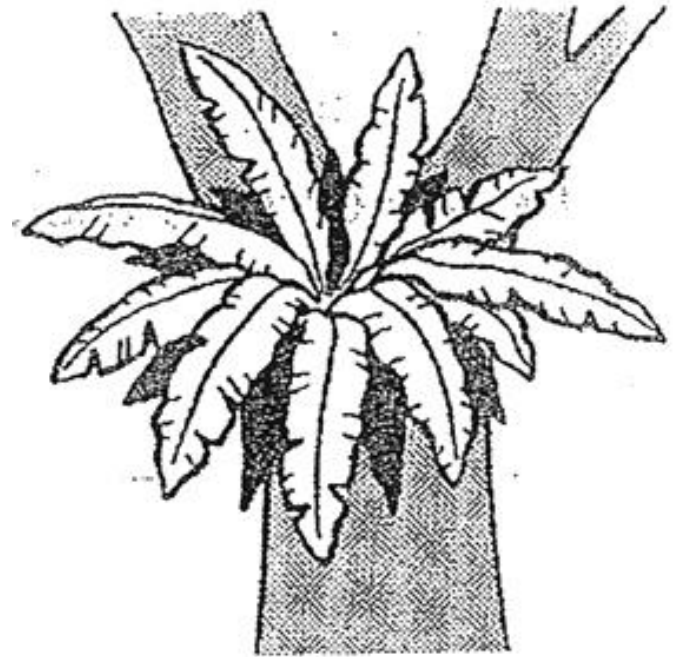
# Flowering Plants

- Reproduce by seeds
- They have plants parts such as
  - Flowers,
  - Fruits which contain the seeds



# Non-Flowering Plants

- Reproduce by spores
- The spores are usually inside spore bags.
- Spore bags found at the back of the leaves





# Difference in Leaves

- All plants have different types of leaves.
- They can be classified into different groups according to

**patterns of their vein**

**OR**

**shape of the leaves**

**OR**

**edge of the leaves**

# Leaves by vein patterns

## Parallel Patterns



## Network Patterns



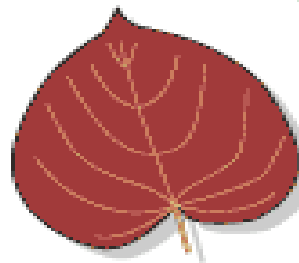
# Leaves by shapes



hand  
shaped



spear  
shaped



heart  
shaped



round

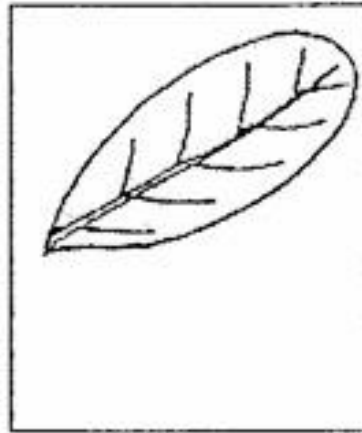


needle

# Leaves by edges



**lobed edge**



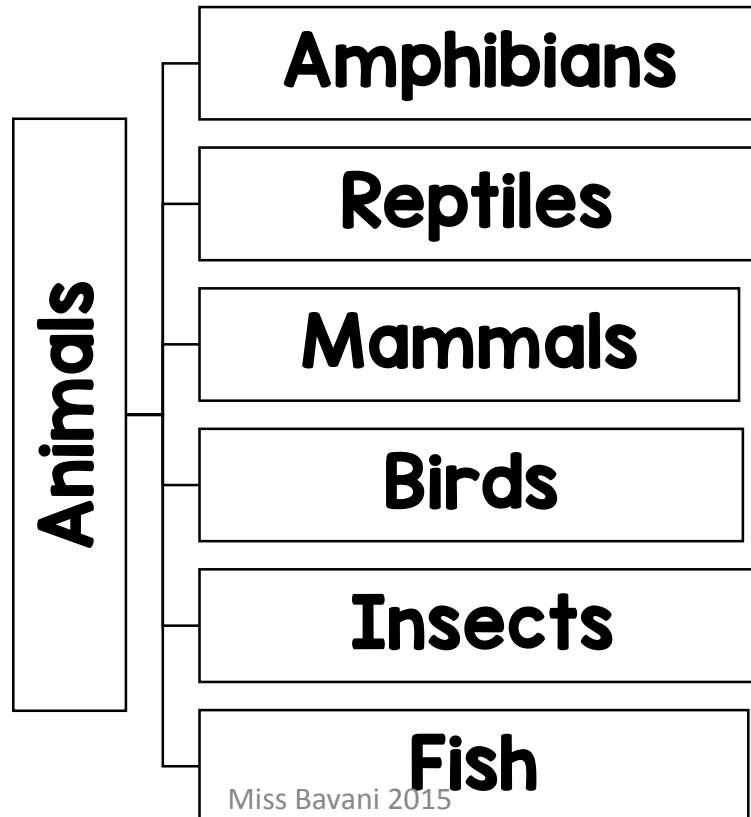
**smooth edge**



**jagged edge**

# What are Animals?

- **Animals are living things that move from place to place freely to find food.**



# How are animals grouped?

- Animals are grouped by the special characteristics they share.

## **Amphibians**

- smooth, slimy skin
- Live on land and water

## **Reptiles**

- Dry, rough skin
- Covered with scales

## **Birds**

- Covered with feathers
- Have 2 wings, a beak and 2 legs

## **Insects**

- 2 feelers, 3 body parts and 6 legs

## **Fish**

- Breathe with gills
- Covered with scales

## **Mammals**

- Covered with hair
- Produce milk for the young.

# Some examples

- Some additional information.

## Amphibians

- Use lungs to breathe on land
- Use skin to breathe in water

## Reptiles

- Tortoise, lizard and crocodile are reptiles

## Birds

- Penguin and Ostrich are examples of birds that cannot fly

## Insects

- Hard outer covering (exoskeleton)
- Some have wings and some do not have wings

## Fish

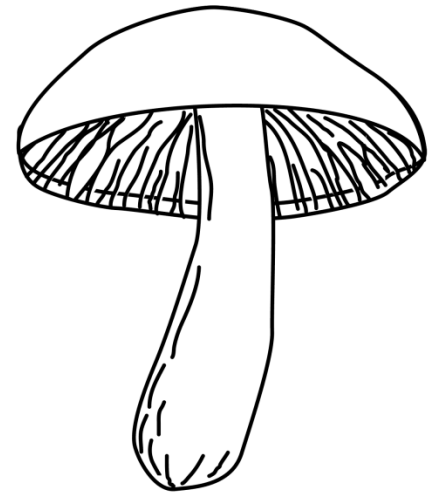
- Most fish lay eggs
- Guppies and Goldfish give birth to young alive

## Mammals

Dolphin and Whale are mammals that live in water  
Platypus and anteater lays eggs

# What are Fungi?

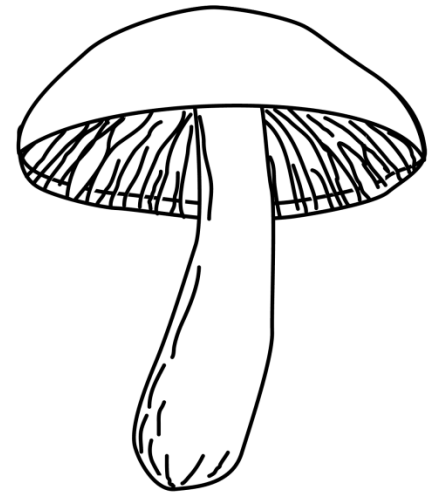
- **Fungi are living things that absorb its food.**
- **It can be found growing on living things and things once alive.**
- **Fungi reproduce by spores.**





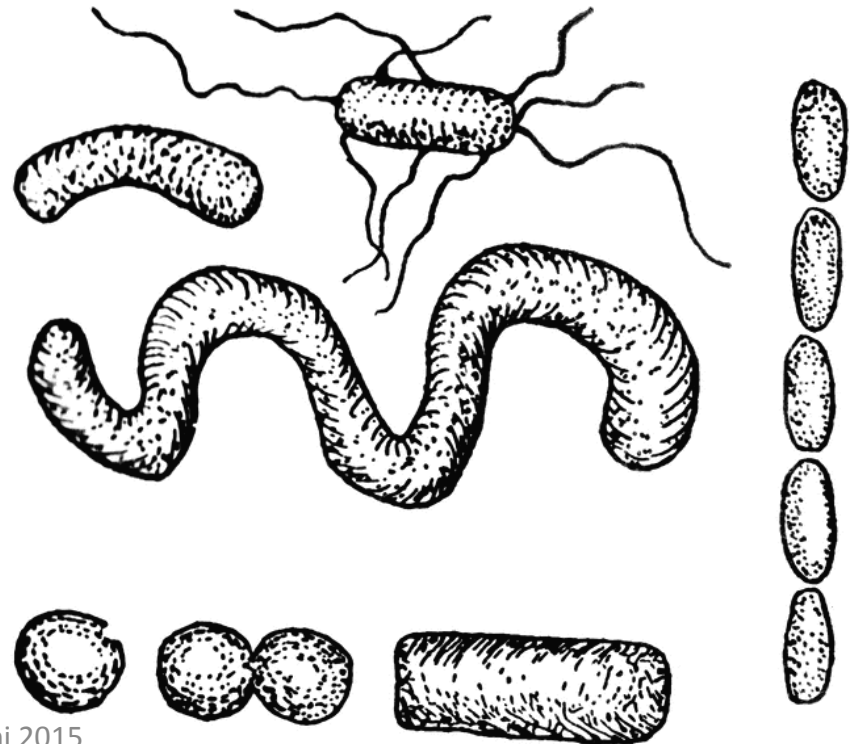
# What are Fungi?

- **Most fungi can be seen with naked eye.**
  - **Mould, Mushroom, Toadstool**
- **Some fungi cannot be seen with naked eye.**
  - **Yeast**



# What is Bacteria?

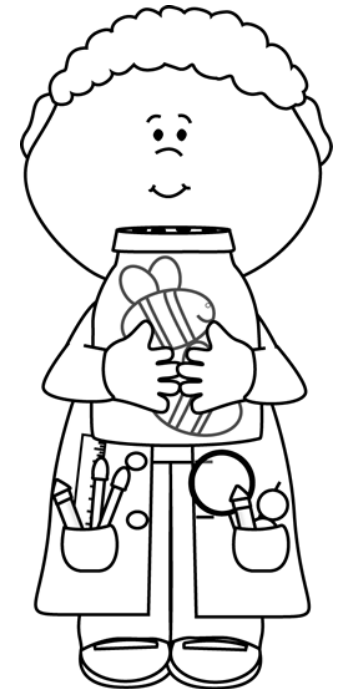
- Bacteria are the living things that cannot be seen by naked eye.
- Bacteria come in many shapes.
- Bacteria reproduce by splitting



# Science Notes

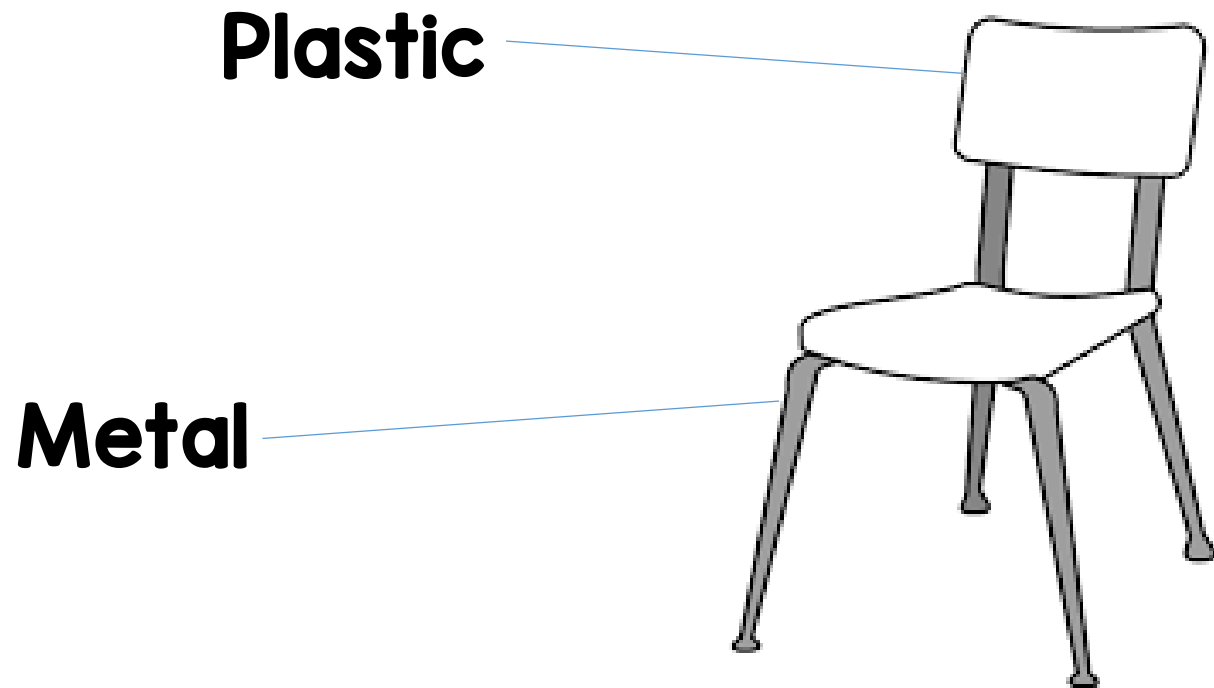
## P3 Diversity

### Materials



# What are materials?

- **Materials are used to build objects.**

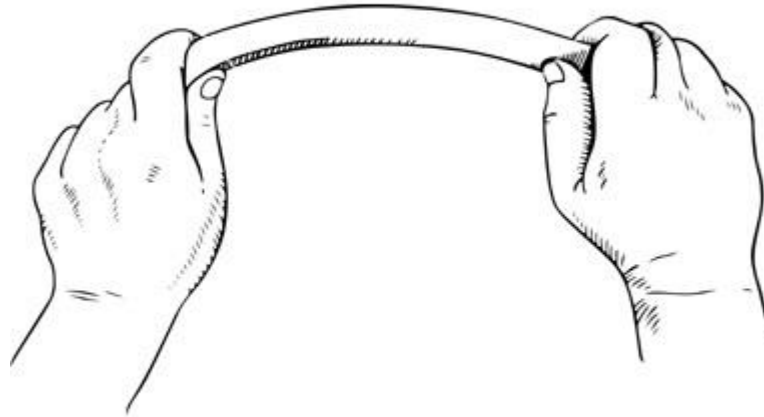


# What are materials?

- **Examples of Materials are**
  - **Wood**
  - **Metal**
  - **Fabric**
  - **Ceramic**
  - **Plastic**
  - **Glass**
  - **Rubber**

# Properties of Materials?

- **Flexible:** The material can be bended without breaking



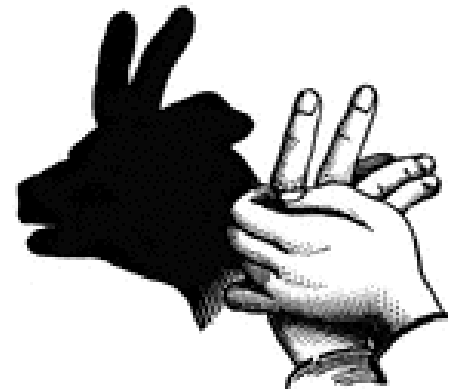
# Properties of Materials?

- **Strong:** The material that does not break easily by mass or force



# Properties of Materials?

- **Transparent:** The material that allows light to pass through.
- **If a material does not allow light to pass through, it forms a shadow.**





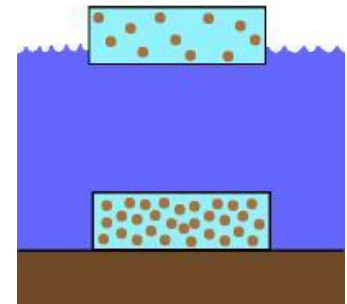
# Properties of Materials?

- **Waterproof:** The material that does not absorb water.
- **Waterproof material also does not allow water to pass through**



# Properties of Materials?

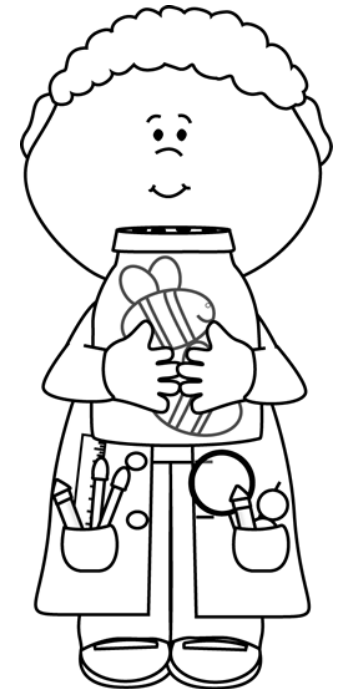
- Ability to float or sink.
- A floating material or object will be at least partially above water.
- A sinking material or object will be fall right to the bottom.



# Science Notes

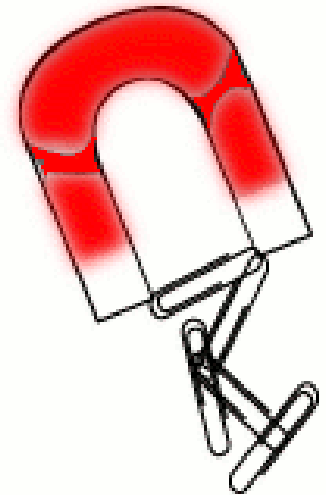
## P3 Interactions

### Magnets



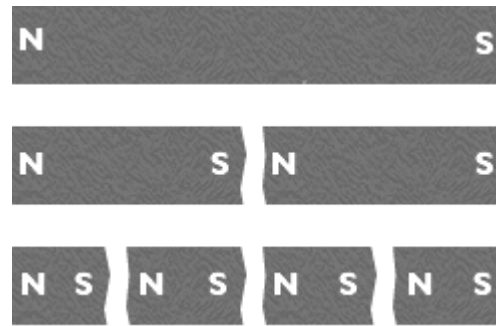
# What can magnets do?

- **Attract magnetic materials**
- **Iron**
- **Steel**
- **Cobalt**
- **Nickel**
- **Magnets can also be made from magnetic materials**

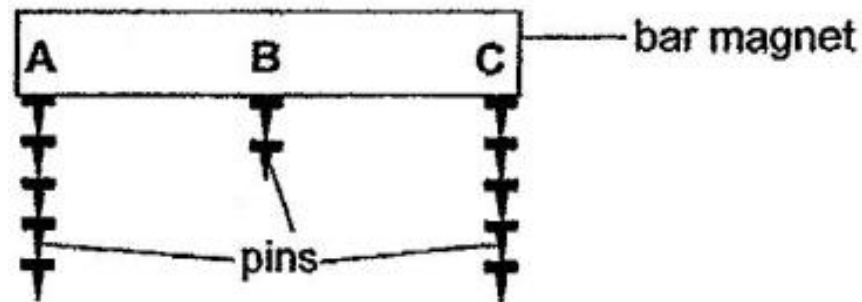


# What do magnets have?

- Magnets have two poles, called North pole and South pole.



- These poles are the strongest part of the magnet



# How do magnets interact?

- Magnets have two poles, called North pole and South pole.
- Like poles repel (push)
- Unlike poles attract (pull)



**OR**



# Summary

- **Magnets**

- **Attract magnetic materials and unlike pole of another magnet**
- **Only repel like pole of another magnet**
- **So you can identify a magnet by repulsion.**