تم تحميل هذا الملف من موقع المناهج الإماراتية

حل تجميعة صفحات الكتاب وفق الهيكل الوزاري منهج انسباير

موقع المناهج ⇦ المناهج الإماراتية ⇦ الصف الثالث ⇦ علوم ⇦ الفصل الأول ⇦ حلول ⇦ الملف

تاريخ إضافة الملف على موقع المناهج: 2024-11-17 22:02:21

المزيد من مادة علوم:	ملفات ا كتب للمعلم ا كتب للطالب ا اختبارات الكترونية ا اختبارات ا حلول ا عروض بوربوينت ا أوراق عمل منهج انجليزي ا ملخصات وتقارير ا مذكرات وبنوك ا الامتحان النهائي ا للمدرس

التواصل الاجتماعي بحسب الصف الثالث

صفحة المناهج الإماراتية على فيسبوك					
المواد على تلغرام	التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات	

المزيد من الملفات بحسب الصف الثالث والمادة علوم في الفصل الأول

1	أسئلة مراجعة نهائية منهج انسباير
2	أسئلة الامتحان النهائي منهج انسباير
3	تجميعة صفحات الكتاب وفق الهيكل الوزاري منهج بريدج
4	أسئلة الامتحان النهائي تمكين منهج بريدج
5	حل مراجعة امتحانية وفق الهيكل الوزاري منهج انسباير

Term-1 EOT Coverage- Science book pages

LO's: Identify the position of things through STREAM activity.
Connect the concepts of position and distance and direction with real life examples

Describe an Object's Position

FRQ (Writing)

VOCABULARY

Look for these words as you read:

direction

distance

motion

position

speed

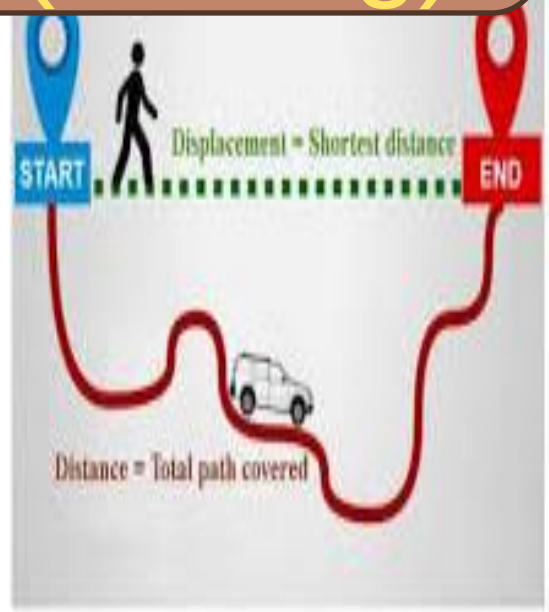
Position Think back to the *Moving Marble* activity. What position was the marble in when you started? Where did the marble end up after it was pushed down the ramp? When you describe the position of something, you compare it to the objects around it. **Position** is the location of an object. You can use words like *above, below, next to,* and *far away from* to describe the position of an object. Look at the boy on the beach. Draw an X on the inner tubes that are above the polka-dotted pink inner tube.

STREAM

LO's: Identify the position of things through STREAM activity.
Connect the concepts of position and distance and direction with real life examples

FRQ (Writing)

Distance The amount of space between two objects or places is **distance**. Millimeters, centimeters, meters, and kilometers are examples of units used in the metric system to measure distance. In the US customary system, distance might be measured in inches, yards, or miles. You can use a ruler or a meterstick to measure distance.



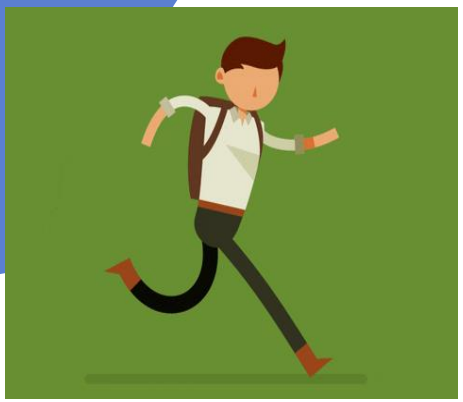
STREAM

MCQ

Motion

Look at the pictures of the dog in different positions. First, you can see that the dog is on the ground. Next, you see the dog come completely off the ground. What happened to the dog? It moved. You know that the dog moved because its position changed. **Motion** is the process of changing position.

GO ONLINE Watch the video *Patterns in Motion* to compare how different things move.



You can observe motion in different ways. Some objects move in a straight line. Other objects can move round and round, back and forth, or in a zigzag pattern.

Measuring Motion

GO ONLINE Explore *Draw the Pattern* to learn more about different patterns.

Distance There are many ways that you can measure motion. One way is to measure the distance that an object moves. As you learned on the previous page, distance is the measurement between an object's starting position and its current position. You can measure larger distances in units such as meters, yards, miles, or kilometers.

Time Suppose it took you three minutes to walk from your classroom to the playground yesterday. Today it took you five minutes to walk to the playground. You moved the same distance, but your motion today took more time. The time it takes to move a distance is one way to describe motion.

Speed Distance and time can be used to find speed. **Speed** is the measure of how fast or slow something moves. An object that is moving fast goes a distance in a short amount of time. It takes a longer time for a slower object to move the same distance.

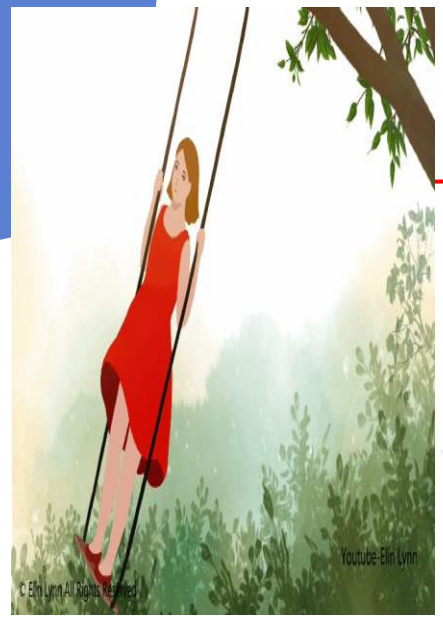
LO's: Define motion and speed. Relate measuring motion with distance, time, and speed

REVISIT PAGE KEELEY Revisit the Page Keeley Science Probe on page 5.

STREAM

MCQ

Direction Direction points out the path from one position to another. Suppose you walk the length of a soccer field. Then, you turn around and walk the whole length back. Is your motion the same both times? Even if the distance and time are the same, the motion is different. You walk different directions back and forth across the field. The direction an object moves is part of the way you describe its motion.



Predicting Motion

Measurements of motion may help you predict future motion. Look at the picture of the girl on the swing. You can predict when she will change direction. You can also predict how much time it will take her to swing back and forth. Draw an arrow predicting the direction the girl will swing next.

What is the pattern of motion when you are on a swing? How can you predict the patterns of motion of the girl swinging in the photo?

Back and forth motion.

LO's: Define motion and speed. Relate measuring motion with distance, time, and speed

STREAM

second paragraph on
fferent types of motion.
Label the different types of motion using words and arrows to show the direction.

GO ONLINE Explore the PhET simulation *Forces and Motion Basics*. Collaborate with a partner. What patterns do you see?

LO's: Analyze about motion. List the types of motion. Relate the connection between position and motion.

FRQ (Writing)

Straight line motion

Round and round motion

Back and forth motion

Zigzag motion

STREAM

Three-Dimensional Thinking

MCQ

1. A ball is moving in a zigzag pattern, but you need it to go straight to reach the goal. How do you change the ball's motion?

   A. I leave it alone. It will go straight when I want it to.

   B. I have to push the ball in a straight line to make it reach the goal.

   C. I have to pull the ball toward me and bounce it on the ground toward the goal.

2. The data below shows the distance a toy car traveled down three different ramps.

	Ramp 1	Ramp 2	Ramp 3
Distance Traveled in 20 seconds	**4 cm**	**12 cm**	**5 cm**

Which ramp is most likely the tallest? Explain how you know.

Ramp 2. It covered maximum distance.

LO's: Recall about motion and its types. Compare and contrast between position and motion

STREAM

MCQ

3. Two objects start at the same location and travel at the same speed for one minute, but they end up in different locations. How did their motions differ?

They traveled in different directions.

LO's: Recall about motion and its types. Compare and contrast between position and motion

STREAM

Forces

FRQ (Writing)

VOCABULARY

Look for these words as you read:

- balanced forces
- force
- friction
- unbalanced forces

Pull

Push

Objects do not move by themselves. A force must be applied to an object to change its motion. A **force** is a push or a pull. When you push on a door handle, you apply a force. When you pull on a wagon handle, you apply a force.

Forces can be large or small. The force that a train engine uses to pull a train is large. The force that your hand uses to lift a feather is very small. It takes larger, stronger forces to move heavier objects than it does to move lighter objects.

GO ONLINE Watch the *Forces Can Change Motion* video to see the effects of different forces.

LO's: Identify the definition of force and list and explore types of forces.
Compare and contrast between balanced and unbalanced forces.
distance, time, and speed

STREAM

There is another type of force called **friction**. Friction is a force that occurs when one object rubs against another. Friction pushes against moving objects and causes them to slow down. Imagine you are running across the gym. You are able to stop because there is friction between your shoes and the floor. Now imagine you are running on ice. It is harder to stop because there is less friction because the ice is very smooth. Smooth surfaces have less friction. When there is less friction, it is harder for an object to slow down and stop.

LO's: Identify the definition of force and list and explore types of forces.
Compare and contrast between balanced and unbalanced forces.

MCQ and FRQ (Writing)

STREAM

Balanced and Unbalanced Forces

MCQ

Forces can set objects into motion. When you put a heavy backpack on your desk, the backpack does not move. Gravity pulls the backpack toward Earth, but your desk pushes up on the backpack with a force. The strength of that force is exactly equal to the pull of gravity. The forces are balanced.

Balanced forces are forces that cancel each other out when acting together on an object. Sometimes balanced forces are equal in size and opposite in direction, but forces do not have to be equal and opposite to be balanced. When an object is sitting still, all the forces acting on it are balanced. However, when objects are moving at a constant velocity, or speed, they are also balanced. Balanced forces do not cause a *change* in motion.

Suppose you push that heavy backpack across your desk. The backpack is moving. This is due to **unbalanced forces**. Forces that are not equal to each other are called unbalanced forces. If there is more than one force acting on an object, then the total of all the forces determines the direction of motion.

LO's: Identify the definition of force and list and explore types of forces.
Compare and contrast between balanced and unbalanced forces.

STREAM

The forces applied to the stuffed bear are balanced, it is not moving.

The dogs are applying a greater force to the sled, so the sled is moving.

Talk About It

Which forces cause a change in motion?

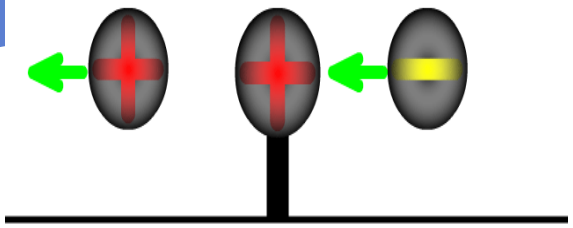
MCQ

Unbalanced force

LO's: Identify the definition of force and list and explore types of forces.
Compare and contrast between balanced and unbalanced forces.

Like Charges Repel

Opposites Attract



MCQ

LO's: Define and explore electrical charge. Differentiate between repel and attract.

VOCABULARY

Look for these words as you read:

- attract
- electrical charge
- repel
- static electricity

Electrical Energy

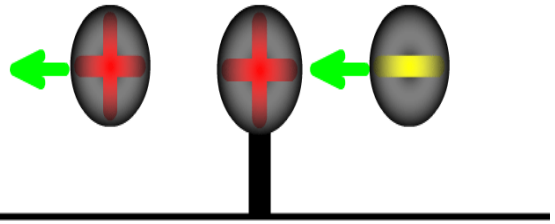
The materials that you used in the *Static Charge* activity are all made of very tiny parts, called particles. All matter is made of particles. Some particles have either a positive or a negative charge. Electrical energy is the energy of these charged particles. The property of matter that causes electricity is **electrical charge**. You cannot see electrical charge, but you can understand how objects with different charges interact. Objects that **repel** each other push each other away. Objects that **attract** each other pull at each other. A discharge occurs when static electricity moves from one object to another.

An object with a positive charge and an object with a negative charge attract.	
Objects that both have a positive charge push each other away.	
Objects that both have a negative charge also push each other away.	

The diagram shows how objects with positive or negative charges affect e

STREAM

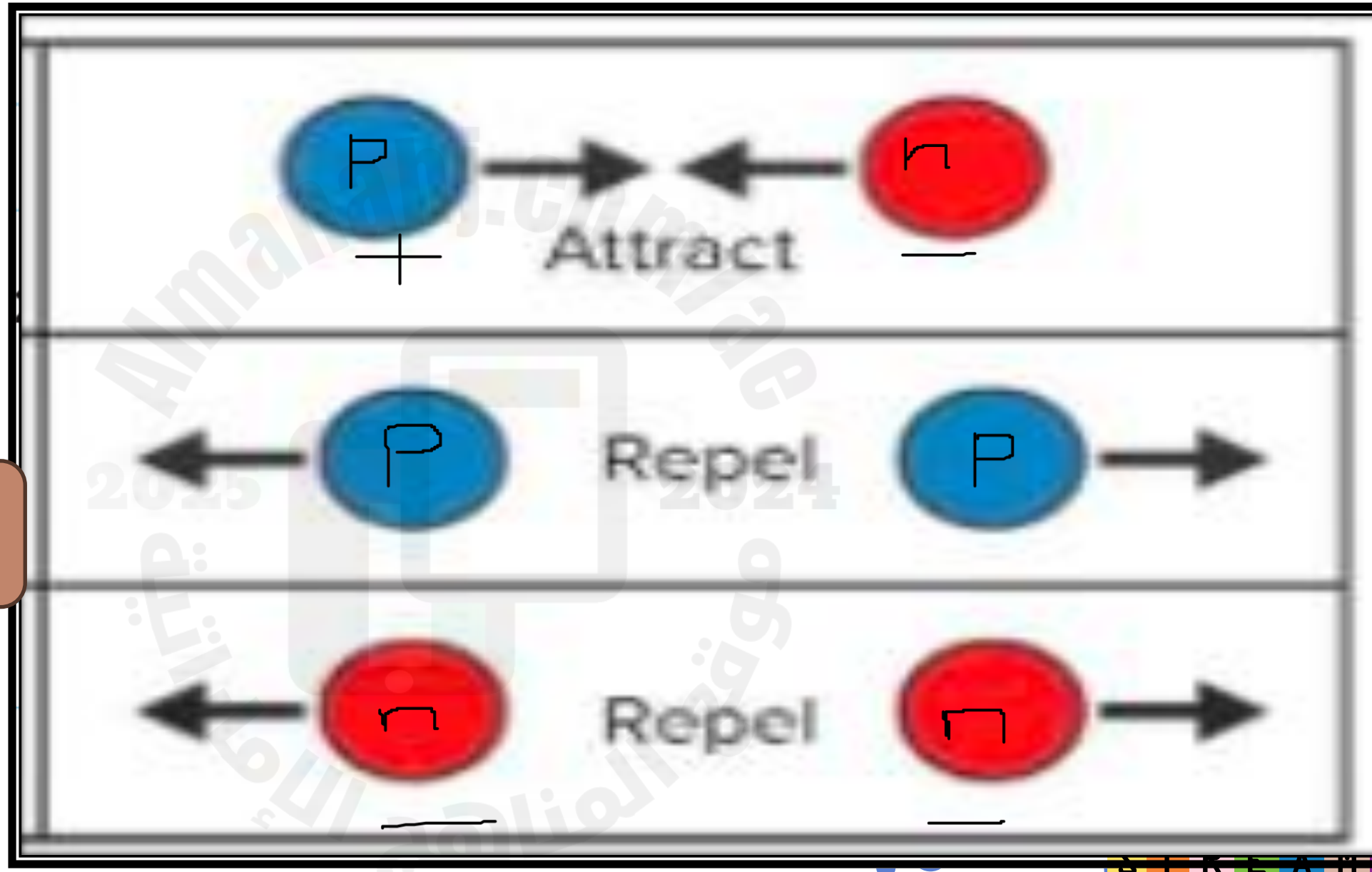
Like Charges Repel
Opposites Attract



MCQ

LO's: Define and explore electrical charge. Differentiate between repel and attract.

1. On the chart, label each particle as "p" for positive or "n" for negative.



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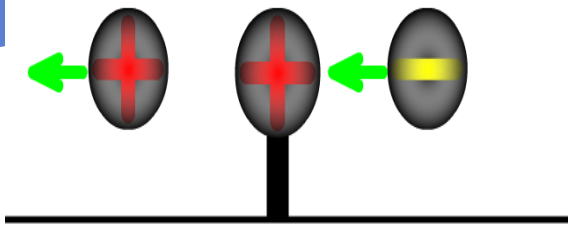
MCQ

Like Charges Repel

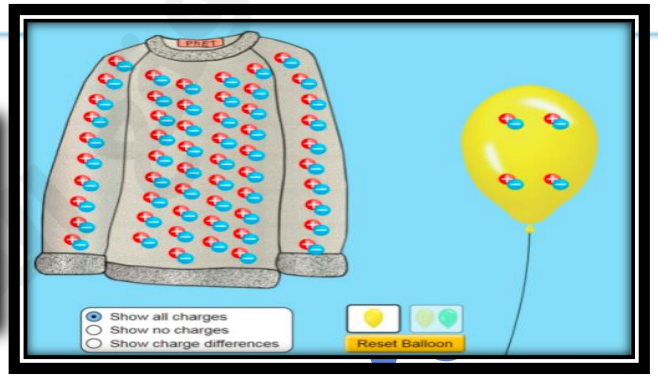
Opposites Attract



2. Explore the simulation. What happens when you rub the balloon on the sweater?

Negative particles move from sweater to balloon.

GO ONLINE Explore the PhET simulation *Balloons and Static Electricity.*

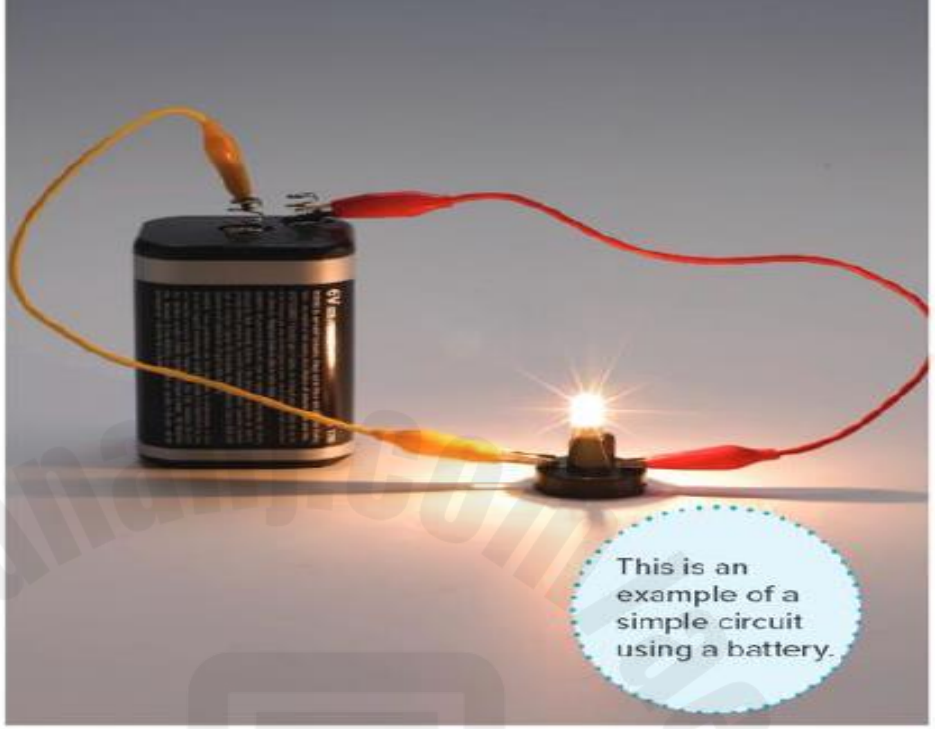


LO's: Define and explore electrical charge. Differentiate between repel and attract.

STREAM

FRQ (Writing)

LO's: Define and explore electrical charge. Differentiate between repel and attract.



Electric current needs a path through which to flow. A circuit is a path that is made of parts that work together to allow current to flow. Simple circuits have several parts. A battery or an electric outlet may be the circuit's source of power. Wires connect the different parts of the circuit. These wires are usually made of copper or another type of metal, and are wrapped in plastic. The last part needed to complete a simple circuit is a load. A load is the device that needs an electric current to work.

People use the energy flowing through electrical currents every day. Look around your classroom. What do you see that uses electricity?

Make Connections

Talk About It

Think about how energy flows in static electricity. Compare it to how energy flows in a circuit.

Notes

LO'sIdentify magnets and define magnetism.
Differentiate between north and south pole of magnets.

VOCABULARY Look for these words as you read:

magnet magnetic field magnetism pole

MCQ

Magnets

A **magnet** is made of material that can attract objects made of iron, cobalt, steel, and nickel. The ability of an object to push or pull on another object that has magnetic property is called **magnetism**. Magnets can attract and repel each other with magnetic forces. Objects attract if there is a force that pulls them towards each other. Objects repel if there is a force that pushes them apart.

Page:72

Magnetic Poles

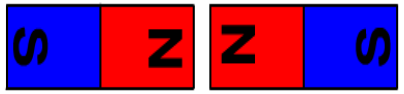
MCQ

Magnets can be made in different shapes and sizes. Magnets sometimes have *N* painted on one end and *S* on the other end. The *N* stands for *north*, and the *S* stands for *south*. Each magnet has a north pole and a south pole. A **pole** is one of the two ends of a magnet where the magnetic force is strongest.

If you hold two magnets close to each other, you can feel a push or pull between them. The diagram on the next page shows how magnets attract or repel each other.

Opposite Poles Attract

Same Poles Repel



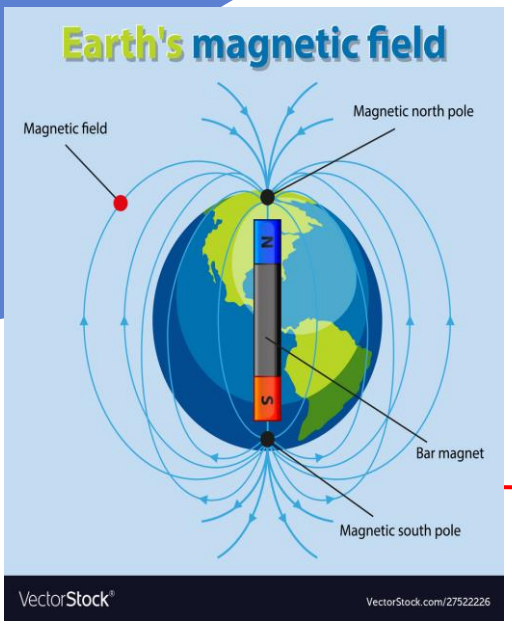
LO's: Identify magnets and define magnetism.
Differentiate between north and south pole of magnets.

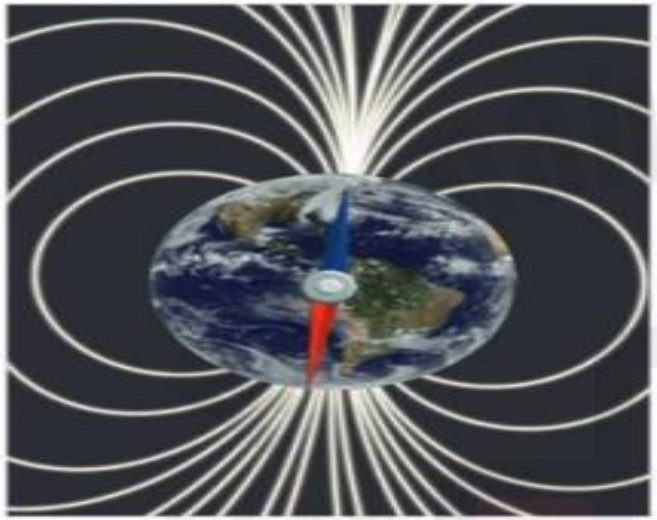
STREAM

MCQ

Earth's Magnetic Field

You just learned that magnetic fields can pass through some objects and not others. Earth is a giant magnet. Iron deep inside Earth creates a huge magnetic field around the planet. Just like a bar magnet, Earth has two magnetic poles.





Earth is surrounded by a magnetic field.

A compass uses magnetism to show direction.

A compass is a tool that helps you find north, south, west, east, and other directions in between. The needle of a compass is a magnet that can move around. The red arrow always points north. Why? Earth's magnetic north pole attracts the compass needle. Before GPS was invented, people used compasses to determine where they were going.

Why does a compass arrow always point north?

The arrow is south pole, so it is attracted by Earth's north pole.

LO's: Define and explore about magnetic field. Compare and contrast between north and south pole of magnets.

STREAM

Plant Needs

MCQ

VOCABULARY

Look for these words as you read:

competition

ecosystem

resource

Wilting

Although most plants grow in soil, a plant can also grow in water without soil if it gets the nutrients it needs.

Like all organisms, plants have needs. Plants get everything they need from their environment. Living things that do not get what they need may die. Plants need air, water, nutrients, light, and space to live.

Plants get a gas called carbon dioxide from their environment. Plants take in the gas through their leaves. They use this gas to make food.

Like all living things, plants need water. They take in water through their roots. Water travels from the roots, up the stem, to the leaves. Plants use water for many life functions. Water helps a plant to stand up. It keeps a plant from wilting. A plant also uses water to make food.

Nutrients are substances that help living things grow and stay healthy. Nutrients are dissolved in water. Plants absorb nutrients when they take in water through their roots.

The green parts of plants collect the energy in light and use it to make their own food.

Plants need space to grow and to get water and sunlight. Different plants need different amounts of space.

LO's: Identify and explore the needs of a plant.
List and describe the function of each part of the plant.

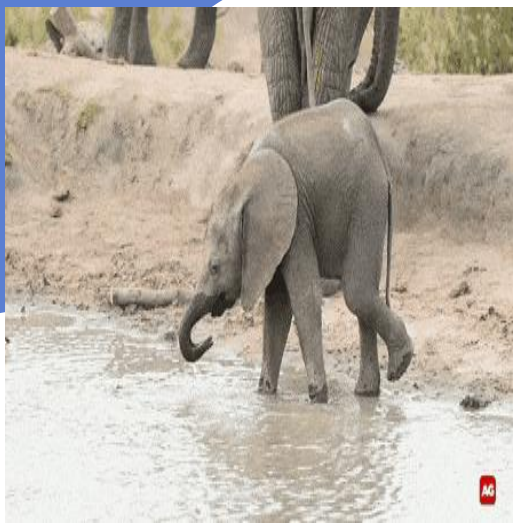
MCQ

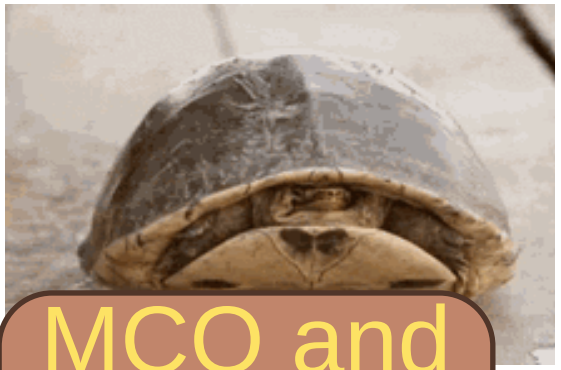
1. Look back in the text and circle five things plants need in order to live.

2. Think back to the Inquiry Activity, *Plant Hunt*. Why might the plant in one location grow taller and greener than the plant in the other location?

It got more sunlight, water, nutrient and space.

LO's: Identify and explore the needs of a plant.
List and describe the function of each part of the plant.





MCQ and FRQ (Writing)

Animal Needs

In order to stay alive, animals need certain things. These include food, water, oxygen, space, and shelter.

Animals need food because it gives them energy to move and grow. Different animals have different physical traits to help them get food. Some meat eaters, like tigers, have sharp teeth to help them bite and tear meat. Many plant eaters, such as cows, have large, flat teeth for chewing.

Animals need water because it helps them turn food into energy and get rid of waste.

Animals need oxygen, which is a gas. Animals get oxygen by breathing. Most land animals use lungs to get oxygen from the air. Some animals that live in water get oxygen from the water by using gills.

Animals need space to move around, grow, find food, and raise their young. Different animals need different amounts of space.

Elephants use their trunks to lift drinking water to their mouths.

When in danger, a turtle will hide its head, legs, and tail inside its shell.

head, legs, and tail inside its shell.

Animals need shelter, or a safe place to be.

No animal can be alert all the time, which means it needs somewhere safe to go. Zebras live in herds, so some zebras can keep watch while others sleep.

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1. Circle five things animals need to survive.

2. What would happen if a tiger did not have sharp teeth?

It would not be able to eat meat.

MCQ and FRQ (Writing)

LO's: Identify and list the needs of animals. Compare and contrast between carnivores and herbivores.

STREAM