SAUSD SCIENCE

Preparing All Students for Success in College and Career

KINDERGARTEN
14 Day Lesson Sequence

NAME_____

TEACHER_____

SCHOOL _____

Lesson Sequence

Day 1: Is it a living thing?
Day 2: Hunt for life
Day 3: Staying alive
Day 4: Plants are alive, too!
Day 5: Thirsty plants
Day 6: Plants have needs, too!
Day 7: Sorting leaves
Day 8: Animal homes
Day 9: Homes that are just right
Day 10: Let's cover up
Day 11: Moving things
Day 12: Be forceful!
Day 13: Be forceful! Part 2
Day 14: Being forceful! Part 3
Extra Day: Following directions

Is it a living thing?

Observations

Living things can move, eat, and grow. Living things can make more living things. They have babies. Things that are not alive cannot do any of these things.

Science activity

Draw a circle around each living thing that is alive.

Science exploration

Name some living things in your house.

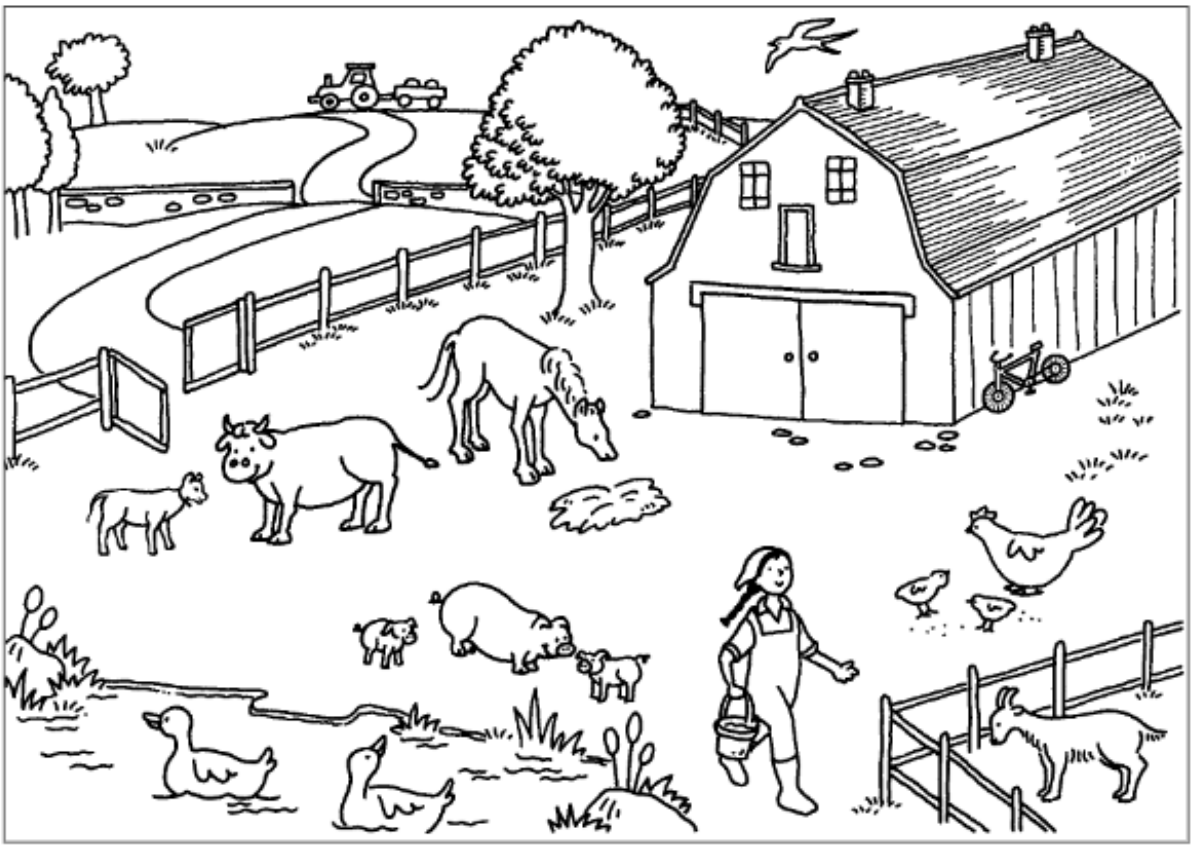
Hunt for life

Observations

Animals are living things that can move from place to place by themselves. Animals are living things that eat food and grow bigger. Living things can produce babies.

Science activity

Look carefully at this picture of a farm. Color in all the things that are alive. Find things that are not alive. Draw a circle around each one.



Staying alive

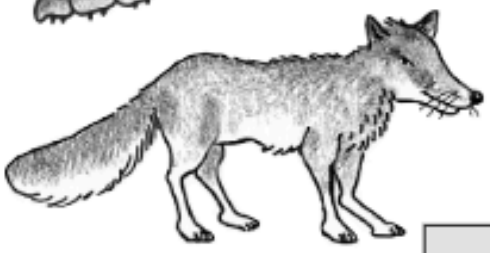
Observations

All animals need to eat food and drink water to stay alive. If animals do not eat or drink, they die. Humans are animals, too, and so need food and water to survive. Some animals eat plants and some eat animals. Humans eat both plants and animals.

Science activity

Draw a line joining each animal on the left to the food it eats.







Science exploration

Make a list of all of the foods that you eat. Next to each food, write the name of the plant or animal from which it came.

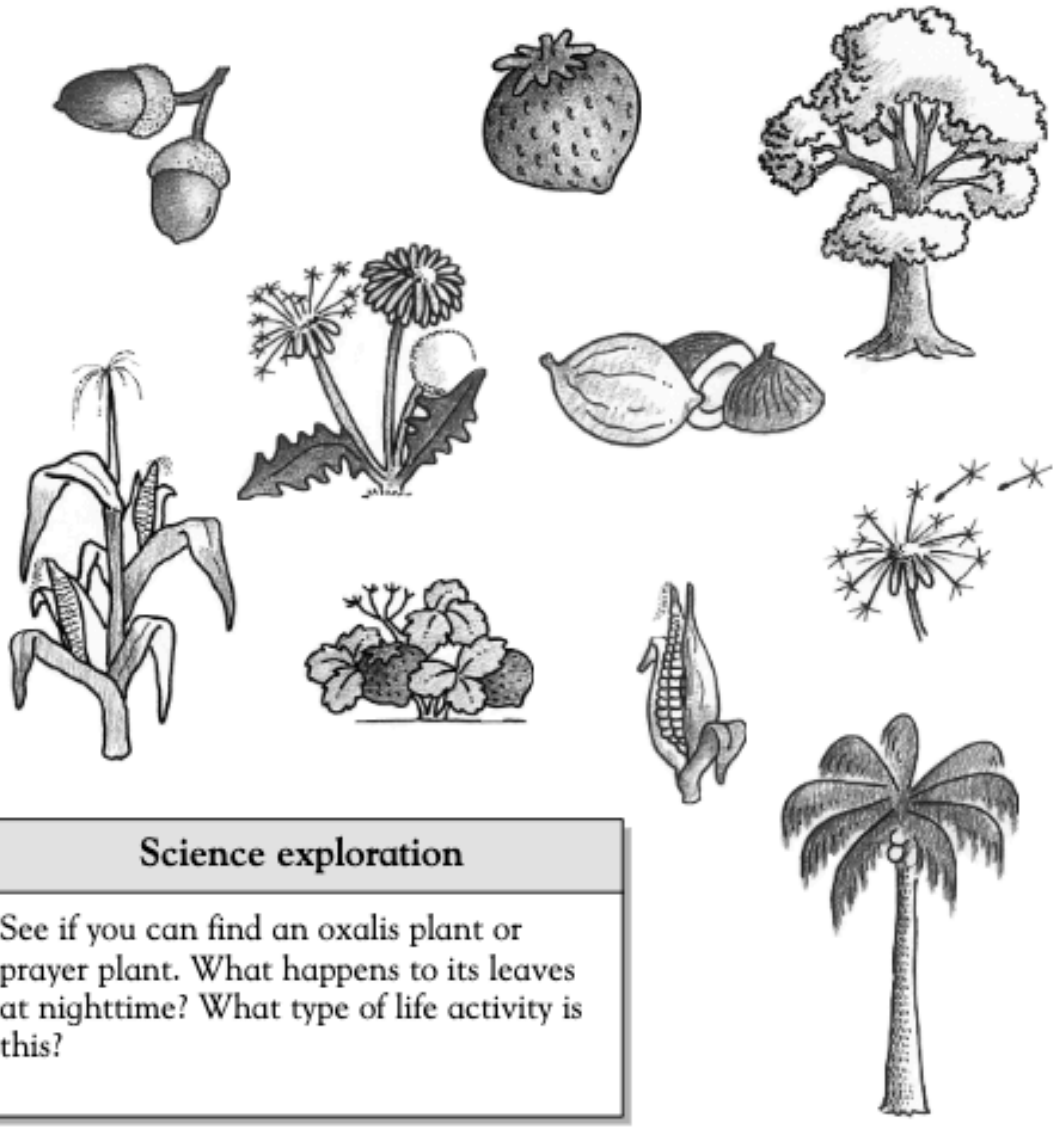
Plants are alive, too!

Observations

When we think of living things, we often think of animals. After all, animals move by themselves, grow, feed, react, and reproduce. Although plants do not move from place to place by themselves, they do grow and reproduce. Plants are living things, too.

Science activity

Draw a line joining each whole plant to the part of it that will grow into a new plant.



Science exploration

See if you can find an oxalis plant or prayer plant. What happens to its leaves at nighttime? What type of life activity is this?

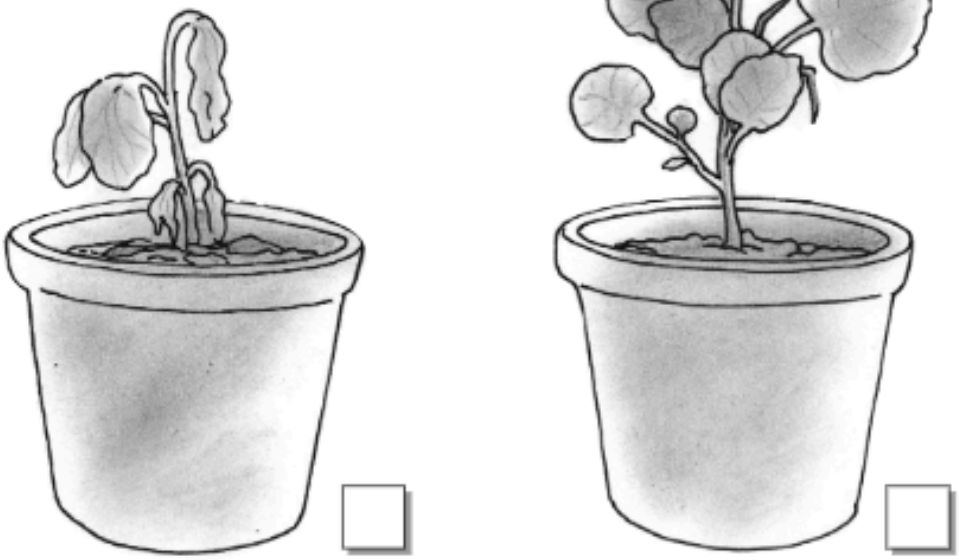
Thirsty plants

Observations

All plants need water to grow.

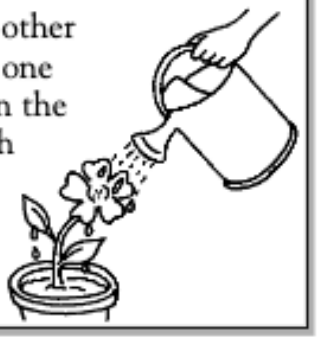
Science activity

Place a check mark (✔) in the box next to the plant that has not been given the right amount of water.



Science exploration

Does a growing plant need other things besides water? Place one plant in the dark and one in the light for a week. Water both equally. What happens? Explain.



Plants have needs, too!

Observations

Plants do not eat other plants and animals. They can make their own food. In order to do this, they need water, a gas called *carbon dioxide* from the air, and sunlight. Without the right amount of any of these, a plant will become unhealthy and die.

Science activity

Look at this picture of a garden. The owners have been on vacation for two weeks.

Why has the grass grown less under the tree than anywhere else?

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Why do the flowers in the hanging basket look unhealthy?

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Science exploration

Grow watercress seeds in two small jars on top of wet cotton. Place one jar in the dark and one in light. Compare the jars after one week.

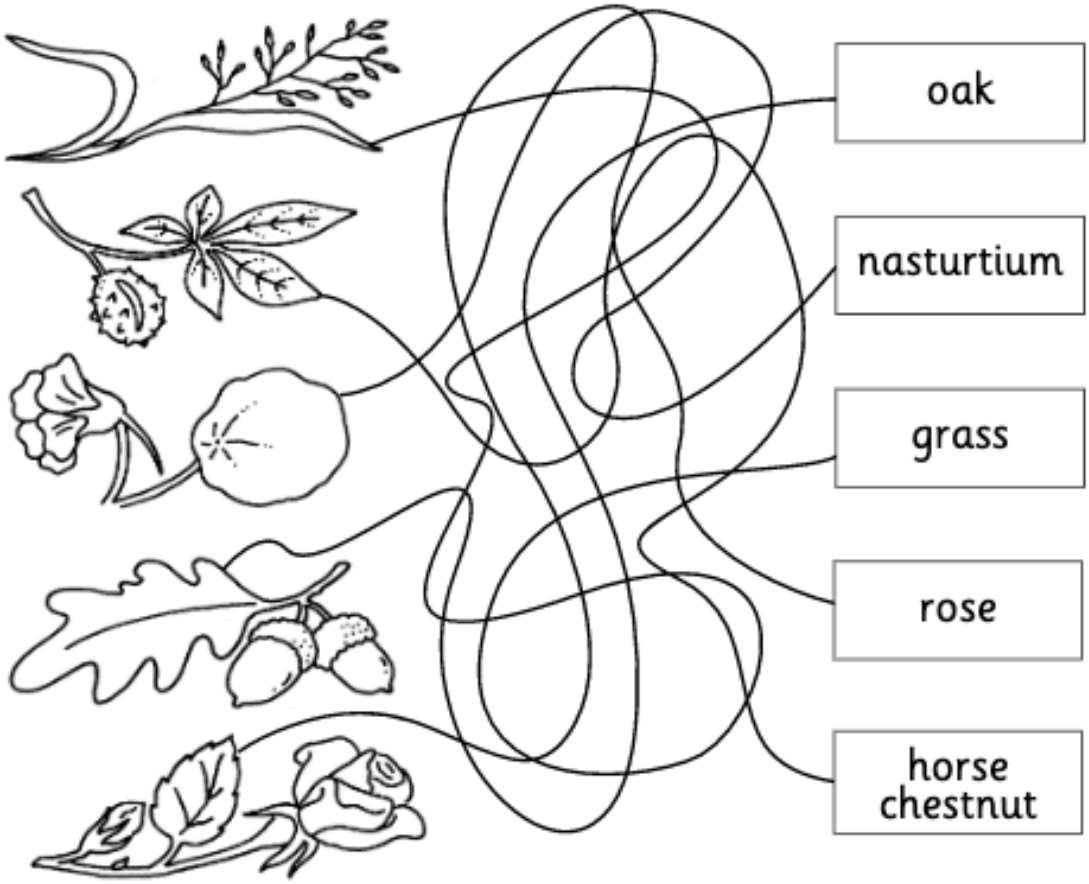
Sorting leaves

Observations

Most plants have leaves. Many leaves are green. Different plants have different-shaped leaves. Plants use their leaves to make food, which helps them grow.

Science activity

Color all the leaves green. How are they different from one another?
Follow the lines to find out the name of each leaf.



Science exploration

(!) **Take extra care - ask an adult to supervise you.**
Collect different tree leaves. Place each leaf on a piece of paper and trace around it. How are the leaves alike and different?

Animal homes

Observations

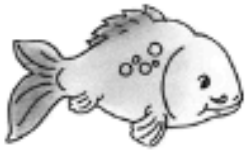
Animals are found in many different places. Some live in gardens, some live in forests, others live in ponds, or in the ocean.

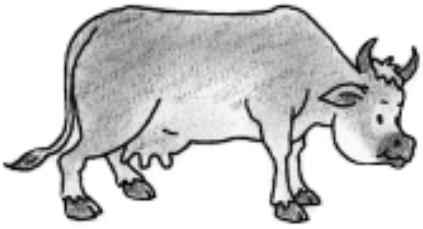
Science activity

Draw a line joining each animal to the place it lives.






Homes that are just right

Observations

Animals can live on land, in soil, in water, and in air. Some of these places are wet. Others are dry. Some are in bright light, others are in shade. Different animals are *adapted* to live in different kinds of places. They have certain features that are just right for where they live.

Science activity

1 Color **orange** one part of a goldfish that helps it live in water.

2 Color **green** one part of a frog that helps it live in water.

3 Color **yellow** the part of a duck that helps it live in the air, and color **blue** a part that helps it live in the water.

Let's cover up!

Observations

A human's body is covered with smooth skin. Different animals have different types of skin. Some animals have hair or fur; others have feathers. Some have scales and spines. Some have a hard shell.

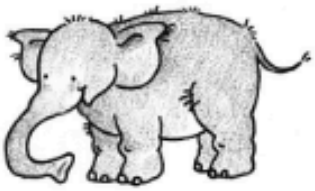
Science activity

Connect each animal to the type of outer covering it has.

feathers

shell

hair



Science exploration

Cover one styrofoam ball with yarn, stick 20 toothpicks in another, and cover a third with plastic wrap. Which covering best protects these "animals" from enemies? Explain.

Moving things

Observations

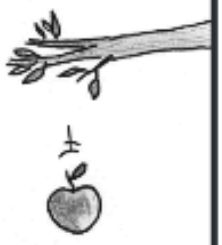
Living things can move by themselves. Things that are not alive move in different ways. Some things fall; some things roll; some things fly; some things slide; some things bounce; and some things pour.

Science activity

Draw a line joining each picture to the word that describes how it is moving.

bounce

roll

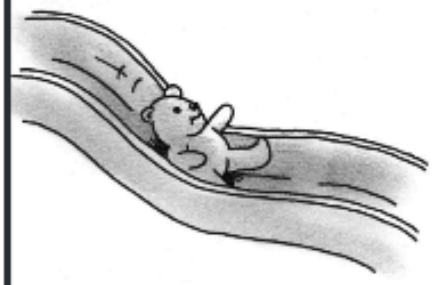


slide

fly

fall

pour



Science exploration

Observe and record how things move at a playground. Try moving in different ways. Can a ball move in some of the ways you do?

Be forceful!

Observations

Things move when you push them and pull them. A push or a pull is a *force* that causes things to go faster or slower, or to stop. When you are very forceful (you give a hard push), you can make a toy car go fast. When you are not so forceful (soft push), the car will go slowly.

Science activity

Do these things need a push or a pull to make them move? Write push or pull under each picture.

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Science exploration

(!) Take extra care - ask an adult to supervise you.

Predict and test what you think will happen if you give a toy car a hard push and then a soft push. Try this with different–sized cars.

Be forceful!

Observations

A push is a *force*. A pull is also a force. Forces can make things move. They can also slow things down. Some forces can make things move fast. They can make some things move faster than others.

Science activity

Samantha is playing with a ball. Color in the pictures where she is making the ball move fast.

kicking

holding

throwing

bouncing

sitting

Which activity makes the ball go the fastest? .....

Science exploration

Drop marbles from different heights onto flattened clay or playdough. What happens to the clay?

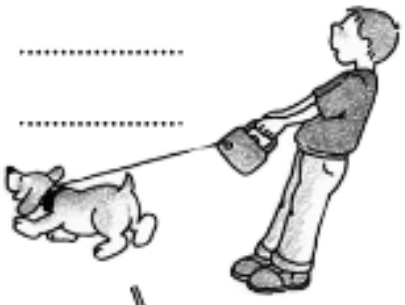
Being forceful

Observations

Pushes and pulls are *forces*. When you push or pull something, you can make it start or stop moving.

Science activity

Look at each picture. Is the child in each picture using a pushing force or a pulling force? Write **push** or **pull** on the first line. Does the force cause something to start or stop moving? Write **start** or **stop** on the second line.



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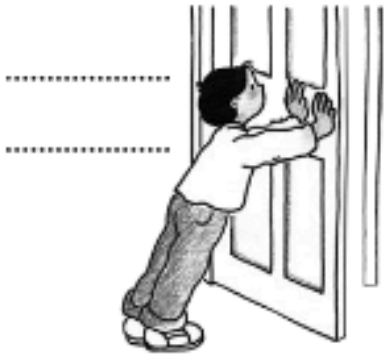

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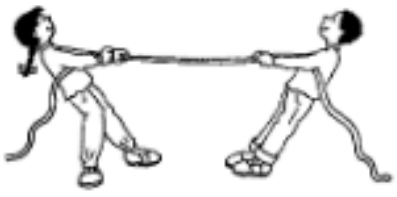
Science exploration

Play tug-of-war with a friend. Are you pushing or pulling? Kick a soccer ball. What type of force will stop the ball?



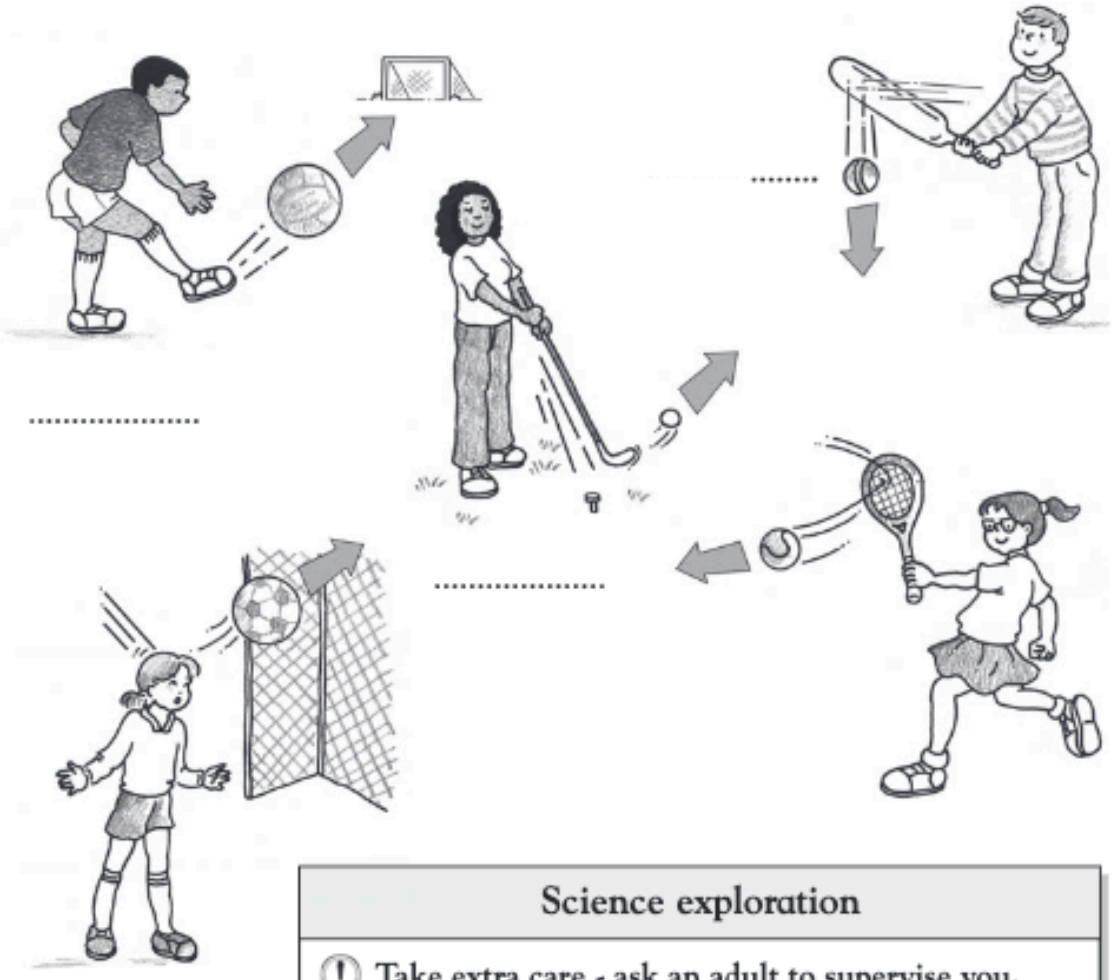
Following directions

Observations

Pushes and pulls are forces. Forces can make moving things change direction. If you blow at a table tennis ball that is rolling towards you, the ball will change direction. When you blow, your breath provides the forces to push the ball.

Science activity

Write **yes** or **no** beside each picture below to say whether or not the player is using a force that will make the ball change direction.



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Science exploration

Take extra care - ask an adult to supervise you.

Design and conduct an experiment to see if it is easier to push a water–filled balloon or air–filled balloon into a basin of water.