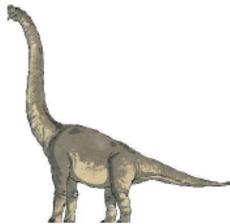


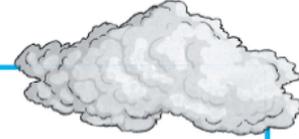
The Water Cycle

The Earth always has the same amount of water. This water moves through stages, called the water cycle. The water cycle is important to life on Earth, and the Sun plays an important role in the cycle.



Did You Know?

The water you drink today could have been used in a dinosaur's bath!



Accumulation

Accumulation is water stored in rivers, lakes, oceans, and in the soil. Oceans hold most of the Earth's water. Groundwater is in the soil and is absorbed by roots to help plants grow.

Evaporation

Evaporation happens when the Sun heats up water and turns it into water vapour. Water vapour is a gas in the air. Water can be evaporated from plants. This is called transpiration.

Condensation

When water vapour is in the air, it cools and turns back to a liquid. This is called

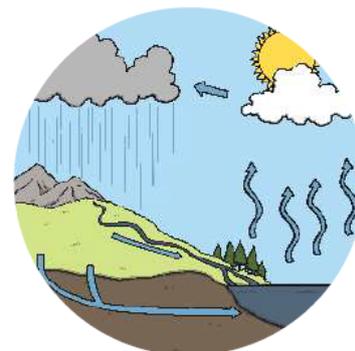
condensation. Water droplets in the air form clouds. But even on a clear day, there is always water in the air.

Precipitation

When more water joins the clouds, they get heavy.

The water falls back to Earth, which is called precipitation. Precipitation gives water to plants and animals. Precipitation can be:

- rain;
- hail;
- sleet;
- snow.



The water will now go through the cycle again.

Message in a Bottle



Question time!

What do you think the boy is afraid of?

What has just happened that is causing him to turn around?

What is he looking at?

Who does he hope will come and help him?

What might the note say?

How did the chair come to be in the ocean?

Why do you think he is dressed in such a fashion?

Skeleton & Bones Facts

Learn some fun bones and skeleton facts for kids. The human skeleton has 6 key functions and our skeleton can be split into 2 main parts.

How many bones are there in the human skeleton? What is the largest bone in the human body? What makes bone marrow so important? Read on and enjoy these interesting facts about our skeleton and bones.

- At birth the human skeleton is made up of around 300 bones. By adulthood, some bones have fused together to end up with 206 bones.
- Human bones grow continually from birth till our mid 20's. Our skeleton's bone mass is at its maximum density around the age of 30.
- If broken our bones will re-grow and repair themselves. Often doctors will place a cast on splint to make sure these bones repair straight and true.
- The axial skeleton part of the human skeleton has 80 bones. It includes the vertebral column, the rib cage and the skull and helps us maintain our upright posture, by spreading the weight in the head, and upper areas down to the lower areas near the hips.
- The appendicular skeletal section of our skeleton has 126 bones. It includes the pectoral (shoulder) girdles, the pelvic girdle and the bones of the lower and upper limbs. Its function is for movement of the body and to protect some organs.
- The human skeletal system has six major functions including the production of blood cells, for support, for movement, for protection, for storage of ions and endocrine regulation.
- The longest bone in the human body is the thigh bone called the femur.
- The smallest bone found in the human body is located in the middle ear. The staples (or stirrup) bone is only 2.8 millimetres (0.11 inches) long.
- Like our [skin](#), the human body's bones are also constantly worn down and re-made, to the point where every 7 years we essentially have a new bone.
- The area of our body with the most bones is the hand, fingers and wrist where there are 54 bones.
- Our [teeth](#) form part of the skeletal system, but are not counted as bones.
- There are just a few differences between human male and female skeletons. The female skeleton is generally slightly smaller and the pelvis bones differ in shape, size and angle in order to assist with child birth.
- The majority of human bones have a dense, strong outer layer, followed by a spongy part full of air for lightness, while the middle contains a soft, flexible, tissue substance called bone marrow.
- Bone marrow makes up 4% of a human body mass. It produces red [blood](#) cells which carry [oxygen](#) all over the body. Marrow also produces lymphocytes, key components of the lymphatic system, which support the body's immune system.
- [Calcium](#) is very important for our bones and helps keep them strong and healthy.
- The areas where our bones meet are called joints. The joints in our cranium have no movement while our hip joints allow for a wide range of movement.
- Bones are held in place at joints by muscles and also tissues called ligaments. Another type of tissue called cartilage covers each bone joint surface area to prevent the bones rubbing.
- The medical branch of learning about the human skeletal system is called Orthopedics.

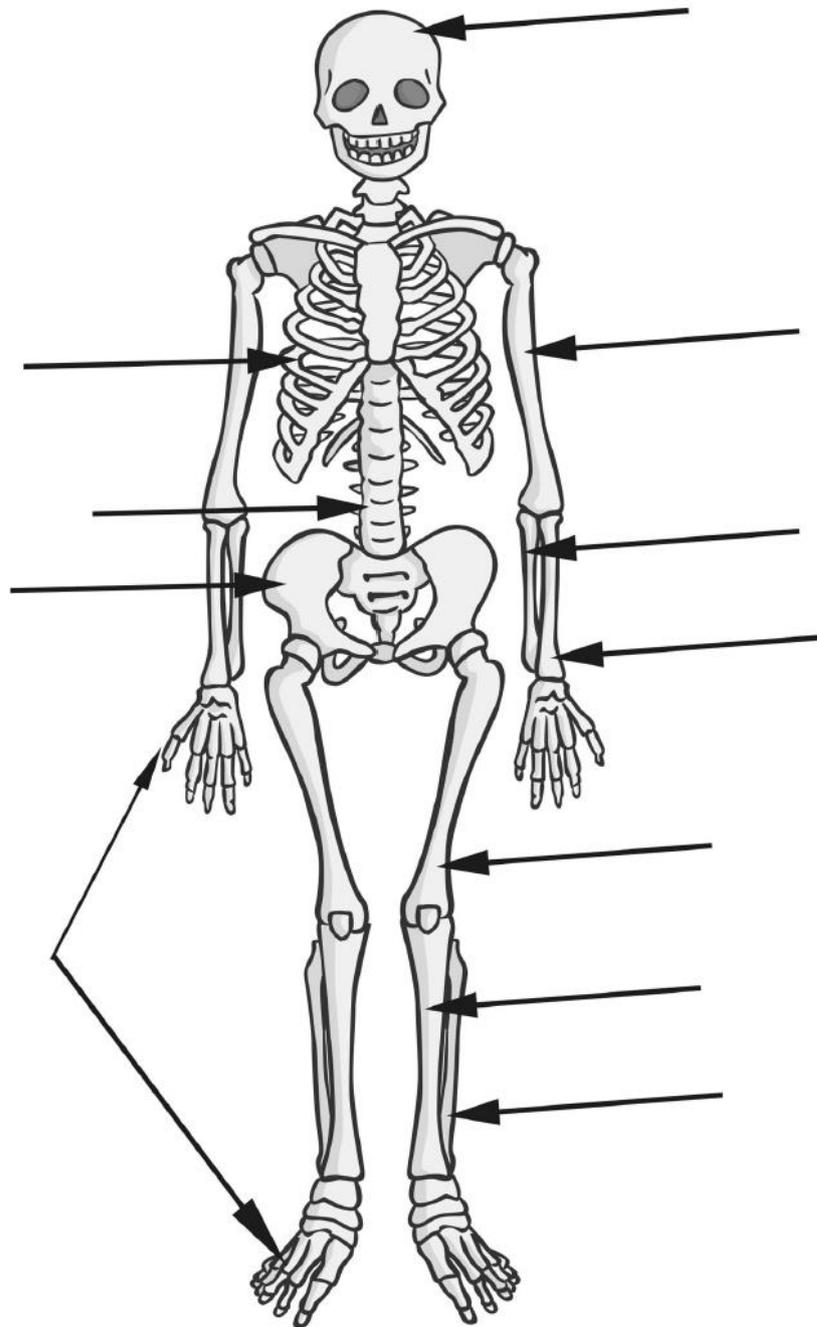
There are a number of skeletal disorders, osteoporosis is a bone disease that increases the chance of fractures, scoliosis is a curvature of the spine, while arthritis is an inflammatory disease that damages joints.

Skeleton Worksheet



Name: Date:

Name the bones in the body using the words at the bottom of the page.



phalanges

ribs

fibula

ulna

skull

tibia

humerus

vertebra

femur

radius

pelvis

Skeleton Worksheet



Name: Date:

1. What is a skeleton? What is it made from?

2. How many bones make up the human skeleton?

3. What connects our bones together so we can move?

4. What would happen if we had no skeleton?

5. What do the ribs protect?

6. How do our bones change from birth to adulthood?

7. What bone protects our brain?

8. What foods are good for developing strong, healthy bones?

9. How does age affect our bones?

10. What happens to most bones when we break them?

Spelling 4 Unit 11 File 11.2 Dots and dashes

<i>unique</i>	
<i>cheque</i>	
<i>antique</i>	

<i>grotesque</i>	
<i>fatigue</i>	
<i>colleague</i>	

<i>catalogue</i>	
<i>dialogue</i>	
<i>league</i>	

Message in a Bottle



Sentence challenge!

Can you think of adjectives to describe the water and how the bottle feels in his hand?

Can you describe how the boy might be feeling? Can you describe the letter inside the bottle?

Sick sentences!

These sentences are 'sick' and need help to get better. Can you help?

The boy held the bottle in his hand. The water felt wet. Clouds were gathering.

The Water Cycle**Questions**

1. Match each word to the correct definition.

Precipitation	Water stored in lakes and oceans.
Evaporation	Rain, snow, sleet or hail.
Accumulation	Water vapour cools and returns to liquid.
Condensation	The Sun heats up water and it becomes water vapour (a gas).
Transpiration	Water evaporated from a plant.

2. Check the true statements.

The Earth always has the same amount of water.

The Moon is important to the water cycle.

Oceans hold most of the Earth's water.

3. List the four stages of the water cycle.

1.

2.

3.

4.

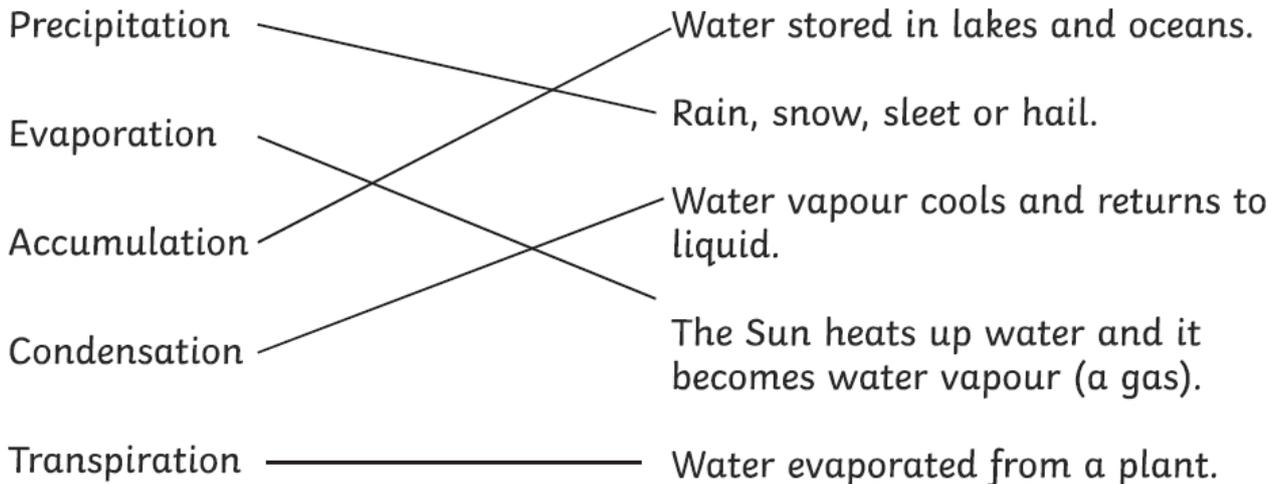
4. What are clouds formed of?

5. Explain the process of evaporation in your own words.

6. Why is precipitation important to plants and animals?

Answers

1. Match each word to the correct definition.



2. Check the true statements.

- The Earth always has the same amount of water.
- The Moon is important to the water cycle.
- Oceans hold most of the Earth's water.

3. List the four stages of the water cycle.

1. Accumulation
2. Evaporation
3. Condensation
4. Precipitation

4. What are clouds formed of?

Clouds are formed of water droplets that have come together.

5. Explain the process of evaporation in your own words.

Example answer: Evaporation happens when water is heated up and turns into the gas, water vapour

6. Why is precipitation important to plants and animals?

Precipitation is important to plants and animals because it gives water for the animals to drink and for plants to use to help grow.

Correct the Spelling Mistakes

The spelling mistakes in these sentences have been highlighted. Write the correct spelling for EACH circled word in the box.

1. It was an amazing **experynce**!
2. Do you **beleeve** there is really a Loch Ness Monster?
3. Billy's favourite type of **froot** is grapes.
4. "What did you **lern** at school today?" asked Mum.
5. The football went **straaght** into the goal!
6. Ria jumped out from behind the tree as a **surprize**.
7. The milk tasted **straynj**.
8. A **cirkle** is round with one curved side.

EACH sentence below has one word that is incorrect. Write the correct spelling of the word in the box.

1. I'm not surtain of the way. I think we're lost!
2. Can you rememmbber what our homework is this week?
3. The cat jumped through the window.
4. What pozition do you play in netball?
5. Jack had a reglar burger and chips.
6. That scarf is diffrent to that one!
7. "Dizcribe what the car looked like," said the police officer.
8. It was a tub of natchural yoghurt.

Whitby Silhouettes



Bubble Numbers

Write your
tables in
bubble writing!

