

Science Worksheet

Instructions

Read each question carefully. Try to answer all the questions. For drawing questions, use the space provided to draw your ideas.

Section A: Objective Questions

Part 1: True or False

Read each sentence. If the sentence is correct, write **T**. If it is incorrect, write **F**.

- The sun is our main natural light source. _____
- A teddy bear can make its own light. _____
- We need light to be able to see things. _____
- A shadow is a type of light. _____
- Darkness is when there is no light. _____
- A clear glass window blocks all light. _____
- The moon makes its own light, just like the sun. _____
- You can have a shadow in a room that is completely dark. _____
- To make a shadow, you must block a light source. _____
- A lit candle gives off light. _____

Part 2: Circle the Light Source

Look at the list of objects below. Circle the names of the things that are **light sources** (they make their own light).

- Sun
- Book
- Lamp (switched on)
- Mirror
- Fire
- Moon
- Chair
- Star
- Firefly
- Bicycle

Part 3: Multiple Choice

Circle the correct answer (A, B, or C) for each question.

1. What do you need to make a shadow?

A. Only an object
B. A light source and an object to block it
C. A dark room

2. Which of these is NOT a source of light?

A. A star

B. A lightning bolt

C. A rock

3. A shadow's shape looks most like...

A. the light source.

B. the object making the shadow.

C. the floor.

4. What is darkness?

A. A black-coloured light

B. The absence of light

C. A very big shadow

5. If you are making a shadow puppet on a wall and you move your hand **closer to the light**, the shadow gets...

A. bigger.

B. smaller.

C. lighter.

6. An object that blocks all light from passing through is...

A. see-through (transparent).

B. light-blocking (opaque).

C. a light source.

7. When is your shadow on the playground the shortest?

A. Early in the morning

B. At midday when the sun is high up

C. Late in the evening

8. What happens if you shine a torch on a brick wall?

A. The light passes through the wall.

B. The wall makes its own light.

C. The light is blocked by the wall.

9. Which of these is a natural source of light?

A. A television

B. A firefly

C. A streetlamp

10. Light travels in...

A. circles.

B. zig-zag lines.

C. straight lines.

Section B: Short Answer Questions

Part 1: Fill in the Blanks

Choose the correct word from the word bank to complete each sentence.

Word Bank: light dark shadow sun block straight

1. We cannot see anything in a completely _____ room.
2. The main source of heat and light for Earth is the _____.
3. A _____ is made when an object blocks the light.
4. A torch is a man-made source of _____.
5. Light always travels in _____ lines.
6. To make a shadow puppet, your hand must _____ the light.
7. At night, with no lights, it is _____.
8. Your _____ follows you around on a sunny day.
9. We need _____ to see colours.
10. A thick tree will _____ the sunlight and create a shady spot.

Part 2: Answer in One or Two Words

Write a short answer for each question.

1. Name one thing in your house that is a light source. _____
2. What is the opposite of light? _____
3. What is the dark shape made by your body on a sunny day? _____
4. Does a clear piece of glass make a dark shadow? _____
5. Can you have a shadow without a light source? _____
6. When the sun is low in the sky, are shadows long or short? _____
7. What object in the sky reflects the sun's light at night? _____
8. If you block a torch, what do you create? _____
9. Does a shadow have details like eyes or a smile? _____
10. Name a tiny animal that creates its own light. _____

Section C: Problem Solving

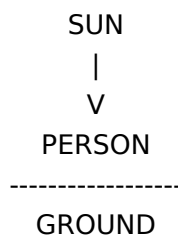
Part 1: Draw the Shadow

In each box, draw what the shadow would look like.

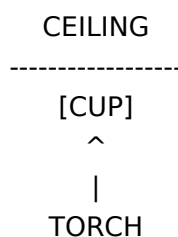
1. A lamp is shining on a square box. Draw the shadow on the wall behind it.

LAMP ---> [BOX] | WALL

2. The sun is high above a person. Draw their shadow on the ground.



3. A torch is pointing up at a cup on a table. Draw the shadow on the ceiling.



4. The sun is setting on the left. It shines on a car. Draw the car's shadow on the right.

SUN ---> [CAR] |

Part 2: What Happens Next?

Write a sentence to explain what happens.

1. You are outside on a sunny day and you walk under a big tree. What happens to the light around you?

2. A cat is sleeping in a patch of sunlight on the floor. As the sun moves, the patch of light moves away. What will the cat's shadow do?

3. You are shining a torch on a wall. Your friend puts a book between the torch and the wall. What appears on the wall?

Part 3: Shadow Detective

Guess the object that is making the shadow.

1. The shadow on the wall has two long ears and a fluffy tail. It looks like a... _____

2. I see a shadow on the ground with five points. It is a... _____

3. This shadow is very tall and thin with branches. It must be a... _____

Answer Key

Section A: Objective Questions

Part 1: True or False

1. T
2. F
3. T
4. F
5. T
6. F
7. F
8. F
9. T
10. T

Part 2: Circle the Light Source

The circled words should be: **Sun, Lamp (switched on), Fire, Star, Firefly.**

Part 3: Multiple Choice

1. B. A light source and an object to block it
2. C. A rock
3. B. the object making the shadow.
4. B. The absence of light
5. A. bigger.
6. B. light-blocking (opaque).
7. B. At midday when the sun is high up
8. C. The light is blocked by the wall.
9. B. A firefly
10. C. straight lines.

Section B: Short Answer Questions

Part 1: Fill in the Blanks

1. dark
2. sun
3. shadow
4. light
5. straight
6. block
7. dark
8. shadow
9. light

10. block

Part 2: Answer in One or Two Words (Example answers, others may be correct)

1. Lamp / Television
2. Dark / Darkness
3. A shadow
4. No
5. No
6. Long
7. The moon
8. A shadow
9. No
10. Firefly

Section C: Problem Solving

Part 1: Draw the Shadow

1. A dark square shadow should be drawn on the wall.
2. A short, dark shadow of the person should be drawn on the ground directly beneath them.
3. A dark, circular shadow should be drawn on the ceiling.
4. A long shadow of the car should be drawn on the ground to the right of the car.

Part 2: What Happens Next? (Example answers)

1. It gets shady/darker because the tree blocks the sunlight.
2. The cat's shadow will also move or disappear from the patch of light.
3. A shadow of the book appears on the wall.

Part 3: Shadow Detective (Example answers)

1. Rabbit / Bunny
2. Star / Starfish
3. Tree