

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
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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.

SUN
|
v
PERSON

GROUND

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

CEILING

[CUP]
^
|
TORCH

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