

- 1) How many sources of light can you think of? Complete the chart with your ideas.
Write at least three words for each one.

Sources of light	
Natural	Artificial

- 2) Select the correct word for the following pictures:



- a:** Direction / Reflection / Refraction / Melting / Expansion / artificial light
b: Direction / Reflection / Refraction / Melting / Expansion / artificial light
c: Direction / Reflection / Refraction / Melting / Expansion / artificial light
d: Direction / Reflection / Refraction / Melting / Expansion / artificial light
e: Direction / Reflection / Refraction / Melting / Expansion / artificial light
f: Direction / Reflection / Refraction / Melting / Expansion / artificial light

3) Answer the following questions:

What happens when light hits a red object?

What happens when light hits a white object?

What happens when light hits a black object?

4) These materials let all light pass through them:

These materials only let some light pass through them:

These materials don't let light pass through them:

5)

Match the halves to make sentences.

- | | |
|---|--|
| a. Rough surfaces do not ● | ● or plastic that refract light. |
| b. Lenses are pieces of curved glass ● | ● reflect very clear images. |
| c. Smooth surfaces reflect ● | ● and then water it refracts. |
| d. When light passes through air ● | ● in many directions. |
| e. Refraction happens when ● | ● look bigger or smaller. |
| f. Rays of light reflect in ● | ● clear images. |
| g. Light refracts from rough surfaces ● | ● light changes direction. |
| h. Lenses can make objects ● | ● one direction from a smooth surface. |

6)

Decide if these statements are true or false. Correct the false ones.

a. Light allows us to see objects' size, shape and colour.

b. Candles are a natural source of light because they come from nature.

d. Lenses are transparent and some can help you see things better.

e. Mirrors reflect some of the light than hits them.

f. A lemon absorbs all colours except yellow

7)

Decide if these objects are thermal conductors or insulators. Then match.

woollen gloves

plastic ruler

copper cooking
pot

paper clip

wooden spoon

thermal
conductors

thermal
insulators

8)

Identify the effects of thermal energy. Then, match the halves to make sentences. Finally, match the texts to the photos.



- | | |
|---|------------------------------------|
| <p>a</p> <p>The thermal energy of a solid increases</p> | <p>and its volume increases.</p> |
| <p>b</p> <p>The thermal energy of a liquid increases</p> | <p>and it changes to a liquid.</p> |
| <p>c</p> <p>The thermal energy of a substance increases</p> | <p>and it changes to a gas.</p> |

9)

Complete the sentences with the words from the box. There is one extra word.

insulator	heat	conductor	translucent
light	transparent	opaque	

- a Without heat and _____ from the Sun, life wouldn't exist on Earth.
- b A material that does not transfer heat very well is an _____.
- c A material that transfers _____ quickly and effectively is a _____.
- d _____ materials only let some light pass through them.
- e _____ objects block light.

10)

Match the words to the correct descriptions.

- | | |
|------------------------|--|
| <p>a. reflection ●</p> | <p>1. They refract light and change the size of an object.</p> |
| <p>b. refraction ●</p> | <p>2. Light hits an object and it bounces back.</p> |
| <p>c. mirrors ●</p> | <p>3. They reflect rays of light and form an image.</p> |
| <p>d. lenses ●</p> | <p>4. Light hits one surface and then another, changing direction.</p> |