



**Zahrat Al-Sahra'a International School**  
**Work sheet**

**Grade 6**  
**L, M, N, O, P**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Sound and light

Unit 3 Lesson 2, 3 and 4

I- Fill in the blanks.

- Matter that transmits light is \_\_\_\_\_. Matter that transmits light but scatters it in all directions is \_\_\_\_\_. When light enters a material but does not leave it, the light is \_\_\_\_\_.
- \_\_\_\_\_ is the transfer of light energy to matter. \_\_\_\_\_ materials do not let any light pass through them because they reflect light, absorb light, or both.
- Light travels more slowly when it passes through \_\_\_\_\_.
- \_\_\_\_\_ wavelengths of light are slower more than \_\_\_\_\_ wavelengths of light.
- \_\_\_\_\_ occurs because light changes speed as it enters a medium at an angle. Light waves with \_\_\_\_\_ wavelengths bend more.
- \_\_\_\_\_ light is scattered more than other colors, so the sky appears \_\_\_\_\_.
- A \_\_\_\_\_ is a clear optical tool that refracts light. The change in speed makes the light waves bend and either \_\_\_\_\_ or \_\_\_\_\_, depending on the lens.
- A converging, or convex, lens is thicker at the \_\_\_\_\_ than at the \_\_\_\_\_. Parallel rays of light converge at a \_\_\_\_\_ after they pass through a convex lens.
- A diverging, or concave, lens is thinner at the \_\_\_\_\_ than at the \_\_\_\_\_. Light that passes through a concave lens is refracted outward as if from the \_\_\_\_\_.
- You see an object when your eyes detect \_\_\_\_\_ and send signals to your \_\_\_\_\_. Some objects \_\_\_\_\_ their own light, while other objects \_\_\_\_\_ light.

11. The cornea \_\_\_\_\_ the light so that it passes through the \_\_\_\_\_ at the \_\_\_\_\_ of the iris.
12. Images are received by the \_\_\_\_\_, the light sensitive tissue that lines the inside of the eye.
13. Rods and cones convert the input into \_\_\_\_\_ signals that travel to the brain through the \_\_\_\_\_. Different parts of the brain take in signals and interpret the \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ of an image.
14. The brain combines slightly different information from the left and right eyes to produce a sense of \_\_\_\_\_ and \_\_\_\_\_.
15. Nearsightedness happens when a person's eye is too \_\_\_\_\_, or the cornea is \_\_\_\_\_. Nearsighted eyes produce an image in \_\_\_\_\_ of the retina, rather than on the retina.
16. Farsightedness happens when a person's eye is too \_\_\_\_\_, or the cornea is \_\_\_\_\_.
17. Color vision deficiency is called \_\_\_\_\_. The person cannot see color due to the abnormal function of \_\_\_\_\_ of the \_\_\_\_\_.
18. Nearsightedness can be corrected with a \_\_\_\_\_ lens. The lens bends the light \_\_\_\_\_ the center of the lens and moves the image back to the \_\_\_\_\_.
19. Farsightedness can be corrected with a \_\_\_\_\_ lens. The lens bends the light \_\_\_\_\_ center of the lens and moves the image forward to the \_\_\_\_\_.

II- **Define the following terms:**

- 1- Transparent: \_\_\_\_\_  
\_\_\_\_\_
- 2- Translucent: \_\_\_\_\_  
\_\_\_\_\_
- 3- Opaque: \_\_\_\_\_  
\_\_\_\_\_

4- Scattering: \_\_\_\_\_

\_\_\_\_\_

5- Lens: \_\_\_\_\_

\_\_\_\_\_

6- Retina: \_\_\_\_\_

\_\_\_\_\_

7- Cornea: \_\_\_\_\_

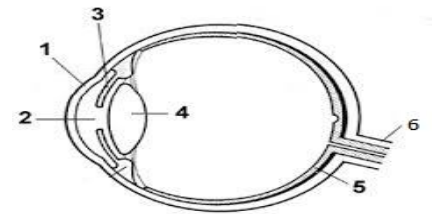
\_\_\_\_\_

8- Refraction: \_\_\_\_\_

\_\_\_\_\_

**III- Answer the following question:**

1- Name the parts of human eye, and write the function(s) of each part.



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2- Write the name of lenses found in figure: 2**

1- \_\_\_\_\_

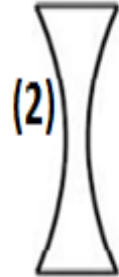
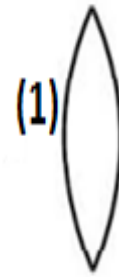
2- \_\_\_\_\_

a- Name the type of lens that can be used to correct farsightedness?

\_\_\_\_\_

b- Name the type of lens that can be used to correct nearsightedness?

\_\_\_\_\_



**Figure: 2**

**Earth's water and atmosphere**

**Unit: 4 Lesson 1**

**I- Fill in the blanks**

1- \_\_\_\_\_ is the condition of Earth's atmosphere at a certain time and place. It can be recognized through \_\_\_\_\_ and can be described by factors such as

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,

\_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

2- \_\_\_\_\_ is a measure of how hot or cold something is. An instrument that measures and displays it is called a \_\_\_\_\_.

3- \_\_\_\_\_ is the amount of water vapor in the air. \_\_\_\_\_

is the amount of water vapor in the air compared to the amount of water vapor needed to reach saturation.

It is measured with a \_\_\_\_\_. When air is saturated; the rates of

\_\_\_\_\_ and \_\_\_\_\_ are equal.

4- \_\_\_\_\_ is the temperature at which the rate of condensation equals to the rate evaporation occurs.

5- \_\_\_\_\_ is any form of water that falls to Earth's surface from the clouds. It includes \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and

\_\_\_\_\_. Rain is measured with a \_\_\_\_\_.

6- Snow forms when air temperatures are so \_\_\_\_\_ that water vapor turns into a \_\_\_\_\_.

When a lot of snow has fallen, it is measured with a \_\_\_\_\_.

- 7- \_\_\_\_\_ is the force of air molecules pushing on an area. It is measured with a \_\_\_\_\_.
- 8- Air pressure and \_\_\_\_\_ are related; they both \_\_\_\_\_ with altitude.
- 9- \_\_\_\_\_ is air that moves horizontally or parallel to the ground. Over short distances, wind moves directly from \_\_\_\_\_ pressure area to \_\_\_\_\_ pressure area.
- 10- An \_\_\_\_\_ is used to measure wind speed.
- 11- Wind direction is measured by a \_\_\_\_\_ or \_\_\_\_\_.
- 12- \_\_\_\_\_ is the measure of the transparency of the atmosphere.
- 13- Poor visibility can be the result of \_\_\_\_\_ or \_\_\_\_\_.
- 14- Some forms of technology provide measurements from set locations, are called \_\_\_\_\_.
- And \_\_\_\_\_ are other forms of technology report changing measurements along their path.

**II- Define the following terms:**

- 1- Dew point: \_\_\_\_\_  
\_\_\_\_\_
- 2- Weather: \_\_\_\_\_  
\_\_\_\_\_
- 3- Humidity: \_\_\_\_\_
- 4- Temperature: \_\_\_\_\_  
\_\_\_\_\_
- 5- Relative humidity: \_\_\_\_\_  
\_\_\_\_\_
- 6- Precipitation: \_\_\_\_\_  
\_\_\_\_\_
- 7- Air pressure: \_\_\_\_\_
- 8- Visibility: \_\_\_\_\_

III- Answer the following questions:

1- Name the elements of weather and give the definition of each one.

---

---

---

---

---

---

---

---

---

---

2- Match the following instruments with what they are used to measure:

- |                             |       |                      |
|-----------------------------|-------|----------------------|
| 1- Thermometer              | (___) | a- Precipitation     |
| 2- Wind vane                | (___) | b- Wind speed        |
| 3- Barometer                | (___) | c- Temperature       |
| 4- Psychrometer             | (___) | d- Wind direction    |
| 5- Rain gauge or meterstick | (___) | e- Air pressure      |
| 6- Anemometer               | (___) | f- Relative Humidity |

Good Luck!