

Winmeen Tnpsc Group 1 & 2 Study Materials

Tnpsc Group 2 Complete Syllabus : <https://goo.gl/fNSnMN>

Tnpsc Group 2 Previous Questions : <https://goo.gl/PYqsd7>

Tnpsc Group 2 Model Questions : <https://goo.gl/xQvyTk>

18. Light

1. What were the words of Nicholas Copernicus?

The polish scientist Nicholas Copernicus suggested that “The earth is not stationary. It spins on its own axis and revolves around the Sun”.

2. When was International year of astronomy declared?

The year 2009 was declared the “International Year of Astronomy”.

3. What are sources of light?

The objects that emit light are called as sources of light.

4. What are the types of light?

Sources of light are of two types : natural and artificial.

5. What are luminous bodies?

During the day, we are able to see with the help of sunlight and during the night, we can see with the help of light from the electric bulb, torch light, candle etc.

Bodies that emit light on their own are called luminous bodies.

6. What are non-luminous bodies?

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Objects like table, chair etc. do not emit light on their own. Objects like these that do not emit light on their own are called non-luminous bodies.

7. How do we see objects?

We see an object we need the following

- a. source of light
- b. object to be seen
- c. observer.

8. What is rectilinear propagation of light?

When the cylinder was bent the same candlelight/object could not be seen. This is because light travels in a straight line. This property is called rectilinear propagation of light .

9. What is the observation of pinhole camera?

The light that comes from the object passes through the pinhole and forms an inverted image on the tracing paper. When the distance between the pinhole and the tracing paper is increased, the size of the image also increases. When the distance is decreased, the size of the image decreases. If the size of the pinhole is increased, the clarity of the image decreases and the image becomes blurred.

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10. What are translucent objects?

The objects which allow the light to pass through them partially are called translucent objects.

11. Give some examples of translucent objects?

Air with dust particles, mist, ground glass, a sheet of paper smeared with oil are some more examples of translucent objects.

12. What is transparent objects?

The objects which allow light to pass through them are called transparent objects.

13. What are opaque objects?

The objects which do not allow light to pass through them are called opaque objects.

14. What are the properties of shadow?

- Shadow is always formed on the opposite side of the light source.
- It only shows the shape or outline of the object and not the details.
- A shadow cast by an intense beam of light is dark.
- A shadow is always black regardless of the colour of the object and the light source.

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- The size of a shadow varies depending on the distance between the object and the source of light, and the distance between the object and the screen.
- (As the distance between the object and the source of light increases the size of the shadow decreases and as the distance between the object and the screen increases the size of the shadow increases)
- Source of light, an opaque object and the shadow will always lie in a straight line.

15. What is reflection?

When a tennis ball is thrown against a wall, it bounces back. Similarly when a beam of light falls on a smooth shining surface, it bounces back into the same medium (solid, liquid or gas). This phenomenon is called reflection.

16. How are eclipse formed?

Shadow is cast since light travels in straight line. Solar and lunar eclipses occur because of this property of light. When the sun, the earth and the moon come in a straight line eclipses are formed.

17. What is lunar eclipse?

When the earth comes between the sun and the moon, lunar eclipse occurs . This happens on a full moon day.

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- The Sun - source of light
- The Earth - opaque object
- The Moon-screen

When the shadow of earth falls on the moon, the moon is hidden. This is called lunar eclipse.

18. What is solar eclipse?

When the moon comes between the sun and the earth, solar eclipse occurs. This happens on a new moon day.

- The Sun - source of light
- The Moon - opaque object
- The Earth-screen

When the shadow of the moon falls on the earth, the sun is hidden. This is called solar eclipse.