

## Worksheet- 4

### Topics- Light & Sound

#### Grade-7

1. Arrange the given range of frequencies of sound as audible and inaudible.

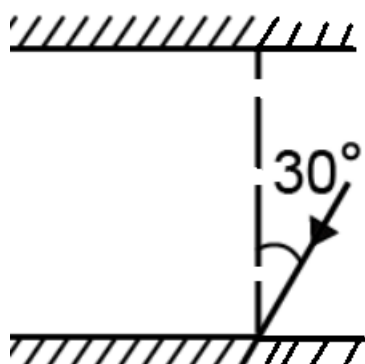
7 Hz, 3000 Hz, 20000 Hz, 10 Hz, 19 Hz, 20001 Hz, 20 Hz, 22000 Hz, 15000 Hz, 50 Hz

Audible: .....

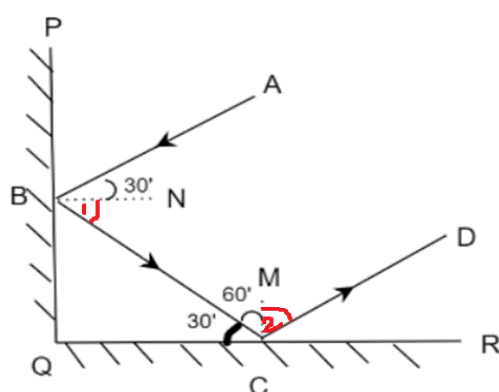
In-Audible: .....

2. Decibel is the units of ..... intensity?

3. i) At what angle will the reflected ray strike the second mirror?



ii) What is value of angle 1 & 2 marked by red colour in the given diagram.



3. i) In which medium speed of sound is maximum? Explain.

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ii) Rarefaction is a ..... Pressure region.

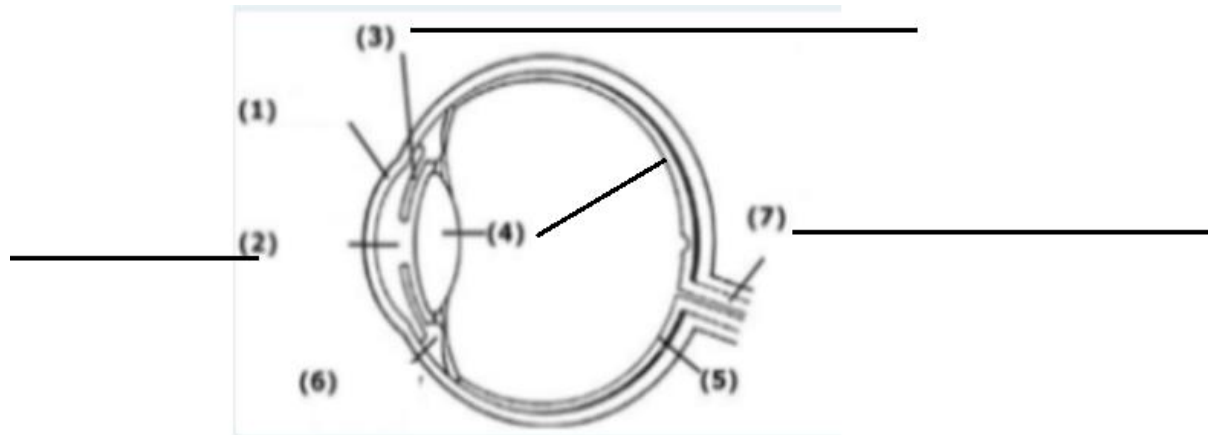
iii) Sound cannot travel through .....

iv) Compression is a ..... Pressure region.

v) What is cause of sound?

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4. Write name of parts of human eye marked by (7), (4), (2) & (3)

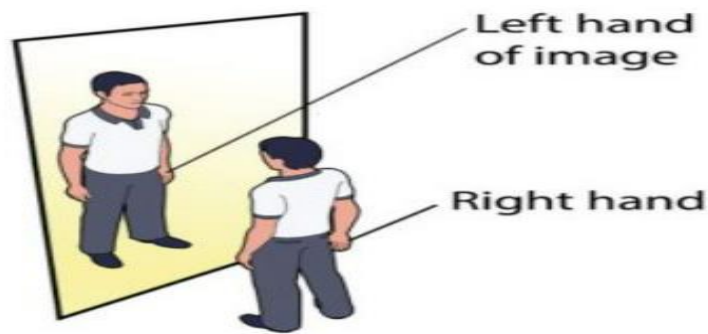


5. Why does the lower part of the pencil & child appear so much thick in size from the upper part?



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6. Which of the following describes an image formed in a plane mirror?



- i) Same distance behind mirror as object is in front
- ii) Laterally inverted
- iii) Same size as object
- iv) All

7. Which property of light is used while using the periscope ?

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8. What is echo?

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9. Give one example that show that speed of light is more than speed of sound.

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10. If the moon is 384000 km from the earth and the sun is 150000000 km from earth. The speed of light is 300000 km/s. calculate the time taken for light to travel from:

(a) the moon to the earth.      (b) the sun to the earth.

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11. Star X is 778,330,000 km away from the Sun and light travels at a rate of 300,000 km/second. How many seconds does it take for light to get from the Sun to star X?

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12. Best regular reflection of light takes place when it strikes

- i) Smooth & silvered opaque surface
- ii) Rough opaque surface

iii) Smooth transparent surface

iv) Smooth opaque surface

13. What is function of the iris and optic nerve of human eye?

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