

LIGHT: MIRRORS AND LENSES
Class 08 - Science (Curiosity)

Time Allowed: 1 hour and 30 minutes

Maximum Marks: 140

1. If you need a mirror to show an enlarged image, which will you use? [1]
 - a) None of these
 - b) Plane mirror
 - c) Convex mirror
 - d) Concave mirror
2. What is the bending of light called when it passes from one medium to another? [1]
 - a) Dispersion
 - b) Reflection
 - c) Refraction
 - d) Absorption
3. Which type of mirror has a reflecting surface that curves inward? [1]
 - a) Convex mirror
 - b) Cylindrical mirror
 - c) Plane mirror
 - d) Concave mirror
4. Why does a paper burn when a concave mirror concentrates sunlight on it? [1]
 - a) Due to concentrated heat at the focus
 - b) Because paper is sensitive to light
 - c) Due to sunlight's chemical properties
 - d) Because of increased light speed
5. How does the image appear when you look into the inner surface of a spoon? [1]
 - a) Erect and smaller
 - b) Inverted and larger
 - c) Erect and larger
 - d) Inverted and same size
6. Which lens is used to correct myopia (short-sightedness)? [1]
 - a) Convex lens
 - b) Plane mirror
 - c) Concave lens
 - d) Prism
7. What does a concave lens do to light? [1]
 - a) Refracts the light in a uniform manner
 - b) Diverges the light
 - c) Converges the light
 - d) Inverts the light
8. What is the angle called between the normal and the incident ray? [1]
 - a) Angle of Refraction
 - b) Angle of Deviation
 - c) Angle of Incidence
 - d) Angle of Reflection
9. What type of reflection occurs from rough surfaces? [1]
 - a) Diffused reflection
 - b) Multiple reflection
 - c) Regular reflection
 - d) Total internal reflection
10. Which type of lens is thicker at the middle compared to the edges? [1]
 - a) Convex lens
 - b) Flat lens

- c) Diverging lens
d) Concave lens
11. Which lens converges light rays? [1]
a) Plane lens
b) Concave lens
c) Convex lens
d) Cylindrical lens
12. Which law states that the angle of incidence is equal to the angle of reflection? [1]
a) Law of Plane Mirrors
b) Law of Parallel Rays
c) Law of refraction
d) Law of Reflection
13. Which line is drawn at 90 degrees to the mirror where the incident ray strikes? [1]
a) Incident ray
b) Normal
c) Plane ray
d) Reflected ray
14. Which type of mirror always forms an erect image smaller than the object? [1]
a) Concave mirror
b) Plane mirror
c) Convex mirror
d) None of these
15. Which surface of a spoon acts like a convex mirror? [1]
a) Handle
b) Inner surface
c) Outer surface
d) Back side
16. How does a magnifying glass help in reading small print? [1]
a) By reflecting the light to make letters appear brighter
b) By absorbing excess light
c) By reducing glare on the paper
d) By increasing the size of the letters
17. What happens to the reflected rays when multiple parallel beams fall on a convex mirror? [1]
a) The beams diverge
b) The beams remain parallel
c) The beams disappear
d) The beams converge
18. What happens when an object is moved away from a concave mirror? [1]
a) The image becomes larger and inverted
b) The image becomes inverted and smaller
c) The image becomes larger and erect
d) The image remains the same size
19. What happens to parallel rays falling on a convex mirror? [1]
a) They remain parallel
b) They focus at a point
c) They diverge
d) They converge
20. What is the ray of light that comes back from the mirror called? [1]
a) Reflected ray
b) Incident ray
c) Normal ray
d) Plane ray
21. **Assertion (A):** Magnifying glasses enlarge the appearance of small text. [1]
Reason (R): Convex lenses enlarge images through focus and curvature.

- a) Both A and R are true and R is the correct explanation of A. b) Both A and R are true but R is not the correct explanation of A.
- c) A is true but R is false. d) A is false but R is true.
22. **Assertion (A):** Convex mirrors are preferred for observing the traffic behind us. [1]
Reason (R): Convex mirrors provide a significantly larger view area than plane mirrors.
- a) Both A and R are true and R is the correct explanation of A. b) Both A and R are true but R is not the correct explanation of A.
- c) A is true but R is false. d) A is false but R is true.
23. What happens to the image in a convex mirror as the object moves away from it? [1]
 24. What effect does the convex lens have on light rays? [1]
 25. How images of objects appear when viewed through a water drop. [1]
 26. Explain why spherical mirrors do not represent a real section of a hollow glass sphere. [1]
 27. Why are concave mirrors used in torches and vehicle headlights? [1]
 28. Differentiate between the reflection of a parallel beam of light on concave and convex mirrors. [1]
 29. How does the reflecting surface of a concave mirror differ from that of a convex mirror? [1]
 30. How do spherical mirrors differ from plane mirrors in their image characteristics? [1]
 31. What type of image is formed by a concave mirror when an object is placed close to it? [1]
 32. Can you explain how a magnifying glass works? [1]
 33. What are the consequences of using a convex mirror instead of a concave mirror in an experiment to focus sunlight? [2]
 34. Identify two uses of concave mirrors in real life. [2]
 35. What are the conceptual differences between how a plane mirror and a spherical mirror form images? [2]
 36. Describe a concave mirror highlighting its characteristics based on its reflecting surface. [2]
 37. Explain why a dentist might choose to use a concave mirror specifically. [2]
 38. Define a lens and describe its two main types. [2]
 39. Describe the changes observed in the beam of light when it is made incident at different angles on a concave mirror. [2]
 40. Why is there a curved line on some reading glasses? [2]
 41. How would you analyze the image changes when using both inner and outer sides of a spoon as mirrors? [2]
 42. If a ray of light falls parallel to the normal on a mirror, what will be the angles of incidence and reflection? [2]
 43. **State whether the given statement is True or False:** [3]
 (a) A spherical mirror with an inward-curved reflecting surface is called a convex mirror. [1]
 (b) A virtual image formed by a plane mirror is erect and laterally inverted. [1]
 (c) Images formed by plane mirrors are always inverted. [1]
 44. What practical applications require the use of convex lenses to magnify images? [3]
 45. How do lenses differ from mirrors in influencing light? [3]
 46. What happens to light rays when they hit the surface of a concave mirror? [3]
 47. Explain how a convex lens functions when an object is placed at varying distances. [3]

48. Discuss how spherical mirrors are used in everyday applications, giving specific examples and their function. [3]
49. Define spherical mirrors and provide examples of where they are used in daily life. [3]
50. What effect does a curved surface have on the appearance of objects? [3]
51. Describe the change in the appearance of letters viewed through a drop of water. [3]
52. In what ways does the distance of an object from a concave lens affect its appearance? [3]
53. Differentiate between a convex lens and a concave lens based on their shape. [3]
54. **Read the following text carefully and answer the questions that follow:** [4]

Spherical mirrors are curved mirrors that reflect light differently from plane mirrors. They are shaped like parts of a hollow sphere and can be of two types: concave and convex. A concave mirror has an inwardly curved reflecting surface, while a convex mirror has an outwardly bulging reflecting surface. Concave mirrors form inverted or magnified images depending on the position of the object, whereas convex mirrors always form smaller, erect images.

Questions:

- Which type of spherical mirror always forms a smaller, erect image? (1)
- Differentiate between concave and convex mirrors. (1)
- Explain how concave mirrors form different types of images. (2)

OR

Why are convex mirrors useful as rear-view mirrors? (2)

55. **Read the following text carefully and answer the questions that follow:** [4]

The laws of reflection state that the angle of incidence is always equal to the angle of reflection, and the incident ray, reflected ray, and the normal at the point of incidence all lie in the same plane. These laws are universal and apply to all types of mirrors, whether plane or spherical. While the direction of reflected rays may differ with mirror shape, the fundamental laws of reflection always hold true.

Questions:

- What is one law of reflection? (1)
- Explain the second law of reflection. (1)
- Why are the laws of reflection considered universal? (2)

OR

How do the laws of reflection explain the working of spherical mirrors? (2)

56. **Read the following text carefully and answer the questions that follow:** [4]

When you look into the inner side of a spoon, it behaves like a concave mirror and shows an inverted or magnified image depending on distance. The outer side of the spoon acts as a convex mirror, forming smaller, erect images. Spherical mirrors are created by polishing glass into a curved surface with a reflective coating. Depending on whether the coating is inside or outside, convex or concave mirrors are formed.

Questions:

- What determines whether a spherical mirror becomes concave or convex? (1)
- How are spherical mirrors manufactured? (1)
- Explain why a concave mirror can magnify objects. (2)

OR

Why does the inner surface of a spoon act differently from its outer surface? (2)

57. **Read the following text carefully and answer the questions that follow:** [4]

A lens is a transparent material, usually glass or plastic, with curved surfaces. Lenses can be convex or concave. A convex lens is thicker in the middle and thinner at the edges, while a concave lens is thinner in the middle and thicker at the edges. Unlike mirrors, lenses allow light to pass through them. A convex lens converges light and is called a converging lens, while a concave lens diverges light and is called a diverging lens.

Questions:

- a. Which type of lens is also called a converging lens? (1)
- b. Differentiate between convex and concave lenses based on their shapes. (1)
- c. Why is a convex lens called a converging lens and a concave lens a diverging lens? (2)

OR

Compare the basic function of mirrors and lenses in image formation. (2)

58. **Read the following text carefully and answer the questions that follow:** [4]

Concave and convex mirrors form images differently from plane mirrors. A concave mirror produces an erect and enlarged image when the object is near, but becomes inverted and smaller when the object is far. A convex mirror always gives an erect, diminished image, covering a wider field of view. Concave mirrors are used in headlights, torches, and dental mirrors, while convex mirrors are used in vehicle side mirrors, road intersections, and surveillance for safety.

Questions:

- a. Which type of mirror always forms a smaller, erect image? (1)
- b. How does the image formed by a concave mirror change as the object moves farther away? (1)
- c. Compare images formed by plane, concave, and convex mirrors. (2)

OR

Why are convex mirrors used in vehicles and road safety? (2)

59. Explain the role of the two laws of reflection when light strikes spherical mirrors. [5]

60. Describe in detail the differences in image formation between plane mirrors and spherical mirrors. [5]

61. Describe the behavior of images formed by a concave mirror as the object is moved closer or farther from the mirror. How do these images differ from those formed by a convex mirror? [5]

62. How do concave and convex mirrors differently direct parallel rays of light? Explain why. [5]

63. Apply the principles of spherical mirrors to explain why a metallic spoon can act as both a concave and convex mirror. [5]

64. **Fill in the blanks:** [10]

- (a) The angle between the normal and the incident ray is called the angle of _____. [1]
- (b) A _____ lens is thicker at the middle than at the edges. [1]
- (c) A lens which is thicker at the edges is called a _____. [1]
- (d) A _____ lens is thinner at the middle than at the edges. [1]
- (e) A concave lens is a _____ lens because it spreads light rays apart. [1]
- (f) A lens thicker at the middle compared to the edges is called a _____. [1]
- (g) The human eye uses a _____ lens to form an image on the retina. [1]

- (h) A plane mirror has a flat _____ surface. **[1]**
- (i) Using a magnifying glass makes letters appear _____. **[1]**
- (j) A concave mirror can form an _____ image when the object is very close. **[1]**

USP

Solution
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1.
(d) Concave mirror
Explanation:
Concave mirrors can form enlarged images when the object is near.
2.
(c) Refraction
Explanation:
Refraction is the bending of light when it passes from one medium to another due to a change in its speed. Lenses work on this principle to form images.
3.
(d) Concave mirror
Explanation:
Concave mirror
4.
(a) Due to concentrated heat at the focus
Explanation:
A concave mirror concentrates sunlight at the focus, generating enough heat to burn the paper.
5.
(b) Inverted and larger
Explanation:
Inverted and larger
6.
(c) Concave lens
Explanation:
A concave lens is used to correct myopia because it diverges light rays. It helps the image to form properly on the retina instead of in front of it.
7.
(b) Diverges the light
Explanation:
A concave lens spreads out light rays, effectively diverging them.
8.
(c) Angle of Incidence
Explanation:
The angle between the normal and the incident ray is known as the angle of incidence.
9.
(a) Diffused reflection
Explanation:
Rough surfaces cause diffused reflection because the reflected rays scatter in different directions. This happens due to irregularities on the surface, so no clear image is formed.
10.
(a) Convex lens
Explanation:
A convex lens is thicker at the middle than at the edges.

11. **(c) Convex lens**
Explanation:
A convex lens is a converging lens because it bends parallel light rays inward to meet at a point called the focus. It is used in magnifying glasses and cameras.
12. **(d) Law of Reflection**
Explanation:
This is one of the fundamental laws of reflection.
13. **(b) Normal**
Explanation:
The normal is perpendicular to the mirror surface.
14. **(c) Convex mirror**
Explanation:
Convex mirrors always produce a diminished and erect image.
15. **(c) Outer surface**
Explanation:
Outer surface
16. **(d) By increasing the size of the letters**
Explanation:
A magnifying glass enlarges letters to make them easier to read.
17. **(a) The beams diverge**
Explanation:
Convex mirrors cause parallel beams to diverge on reflection.
18. **(b) The image becomes inverted and smaller**
Explanation:
Concave mirrors invert the image and reduce size with distance.
19. **(c) They diverge**
Explanation:
Convex mirrors cause the beams to spread out.
20. **(a) Reflected ray**
Explanation:
Reflected ray is the light that bounces off the mirror.
21. **(a) Both A and R are true and R is the correct explanation of A.**
Explanation:
Magnifying glasses contain convex lenses that focus and enlarge images.

22. **(a)** Both A and R are true and R is the correct explanation of A.

Explanation:

Both A and R are true and R is the correct explanation of A.

23. The image remains erect but becomes slightly smaller as the object moves away.

24. A convex lens focuses or converges light rays towards a single point. It bends the light inwards, concentrating the rays as they pass through and producing a focused image.

25. When viewed through a water drop, images of objects appear magnified because the curved drop acts similarly to a convex lens, bending light to enlarge the text beneath.

26. Spherical mirrors are formed by grinding and polishing flat glass into curves, not by slicing a hollow sphere.

27. Concave mirrors focus light to one point, enhancing brightness, making them ideal for directing beams in torches and headlights.

28. A concave mirror converges parallel beams to a focal point, while a convex mirror diverges parallel beams, spreading them outward from the surface.

29. A concave mirror's reflecting surface curves inward, while a convex mirror's reflecting surface bulges outward.

30. Spherical mirrors change the image size based on object distance, whereas plane mirrors always produce an erect image of the same size.

31. The image is erect and larger than the object. It is an enlarged image.

32. A magnifying glass is a convex lens that makes objects appear larger by bending light rays to converge at a point closer to the eye, enhancing the size of the viewed image.

33. Using a convex mirror, which causes divergence, is ineffective for focusing sunlight in experiments requiring convergence to a focal point, thereby failing to concentrate sunlight sufficiently to ignite paper.

34. Concave mirrors are used in torch reflectors and vehicle headlights to focus light beams. They are also used in dental mirrors to provide an enlarged view of teeth, and in reflecting telescopes for wide, clear images of astronomical objects.

35. A plane mirror forms images that are the same size and orientation as the object, reflecting light uniformly back. In contrast, a spherical mirror, either concave or convex, alters the size and orientation based on curvature, either converging or diverging light to affect image scale or inversion.

36. A concave mirror has a reflecting surface that curves inward. It forms images that can be inverted and enlarged, depending on the position of the object. Concave mirrors are used in applications like reflecting telescopes and shaving mirrors due to their image formation properties.

37. A dentist uses a concave mirror because it enlarges the image of the teeth, aiding in inspection by providing a more detailed and closer view. This helps in accurate diagnosis and treatment within the confined space of a mouth.

38. A lens is a piece of transparent material with curved surfaces. The two main types of lenses are convex lenses, which are thicker in the middle and thin at the edges, and concave lenses, which are thicker at the edges and thin in the middle. They alter the way light travels through them to see different objects.

39. When a beam of light is incident at different angles on a concave mirror, it gets converged at various points. The point of convergence shifts based on the angle, illustrating the mirror's curved surface's effect on light paths.

40.

- Reading glasses often use convex lenses, which are curved to help focus light and make small text look bigger.

- The curve helps bend light rays to fix vision problems, like making far or near things clearer.

41. The concave (inner) side of the spoon acts like a concave mirror, showing inverted images that change size as distance varies. Meanwhile, the convex (outer) side resembles a convex mirror, producing smaller, upright images. This demonstrates how mirror curvature affects image properties, essential in optics applications.

42. When a ray of light falls parallel to the normal on a mirror, both the angles of incidence and reflection will be zero because the ray follows the direct path of the normal.

43. State whether the given statement is True or False:

(a) **(b)** False

Explanation:

A concave mirror has an inward-curved reflecting surface.

- (b) **(a)** True

Explanation:

A plane mirror forms a virtual and erect image. It also shows lateral inversion, where left and right sides of the image are reversed.

- (c) **(b)** False

Explanation:

Plane mirrors produce upright images.

44. Convex lenses have practical applications in magnifying glasses, microscopes, reading glasses, and telescopes. They are essential in enhancing visual clarity by increasing object size, aiding not only in scientific research and health but also in observational tasks requiring detailed scrutiny or enhancing vision for individuals with farsightedness.
45. Lenses and mirrors influence light differently. Lenses allow light to pass through, focusing or diverging rays, creating images seen through them. Mirrors, however, reflect light that strikes them, producing images on their reflective surfaces. Lenses transform light by altering its path, while mirrors rely on reflection to alter visual perception.
46. When light rays hit a concave mirror, they reflect and converge at a single point called the focal point. The shape of a concave mirror causes parallel light rays to focus inward, which can create an enlarged, real, or virtual image depending on the object's position relative to the focal point. Concave mirrors are often used in places where magnifying the image is necessary, such as in telescopes and shaving mirrors. Their reflective properties allow them to gather and focus light efficiently.
47. A convex lens bends light rays together or converges them. When an object is placed close to the lens, it appears larger and upright. As the distance increases, the object initially enlarges more but later inverts and appears smaller. This transformation helps in forming images on screens, projectors, and human eyes.
48. Spherical mirrors have practical uses: concave mirrors in flashlights focus beams; dental mirrors magnify views; telescopes gather distant light. Convex mirrors enhance safety, broadening store surveillance and road visibility. Their ability to alter light direction and image size makes them indispensable across varied fields.
49. Spherical mirrors are mirrors with reflecting surfaces that are parts of a sphere. They are of two types: concave and convex. Concave mirrors have an inward-curving surface and are used in makeup mirrors and astronomical telescopes. Convex mirrors curve outward and are used as rear-view mirrors in vehicles. Both types alter the appearance of images, making them appear larger, smaller, or inverted. Their curved shape makes them suitable for a variety of optical applications in daily life.
50. A curved surface can alter the appearance of objects by enlarging, focusing or making them appear smaller. When light passes through a curved surface, such as a water drop, it bends or refracts, changing how we perceive the objects behind it. For example, a convex lens can enlarge images, while concave lenses minimize them.
51. When letters are viewed through a drop of water, they appear magnified or enlarged. The drop of water acts like a convex lens, bending and focusing light rays passing through, which magnifies what is seen. This shift in perception highlights the focusing property of curved surfaces, emphasizing the role lenses play in vision.
52. In a concave lens, an object remains erect yet diminutive. The image size decreases as the object's distance escalates, diverging more light rays. This knowledge underpins practical optics applications by defining image magnification scopes and instrument calibration algorithms, crucial for photographers, scientists, and astronomers when optimally fine-tuning observation tools.
53. A convex lens is broader at the center than at the edges, converging light rays inward, known as a converging lens. Meanwhile, a concave lens is thicker at the edges than the center, diverging light rays outward, termed as a diverging lens. Their differing shapes impact how each bends and focuses light.
54. a. A convex mirror always forms a smaller, erect image.
b. A concave mirror has an inwardly curved reflecting surface and can form magnified or inverted images. A convex mirror has an outwardly curved surface and always forms smaller, erect images of objects.

- c. Concave mirrors reflect light inward, and the type of image depends on the object's distance from the mirror. If the object is close, they form magnified, erect images. If it is far, the image appears inverted and smaller.

OR

Convex mirrors always produce smaller, erect images and provide a wider field of view than plane or concave mirrors. This allows drivers to see more of the road behind them, making them ideal for rear-view mirrors in vehicles.

55. a. One law of reflection is: The angle of incidence is equal to the angle of reflection.
b. The second law of reflection states that the incident ray, the reflected ray, and the normal to the surface at the point of incidence all lie in the same plane. This ensures consistent image formation.
c. The laws of reflection are universal because they apply to all types of mirrors—plane, concave, or convex. Regardless of the mirror's shape, every reflected ray follows the same principles: the angle of incidence equals the angle of reflection, and the incident ray, normal, and reflected ray always lie in one plane.

OR

In spherical mirrors, even though the reflecting surface is curved, each individual ray still obeys the laws of reflection. Thus, concave mirrors make parallel rays converge, while convex mirrors cause them to diverge. These image patterns are possible because every ray follows the same fundamental reflection rules.

56. a. The position of the reflective coating determines whether a spherical mirror is concave or convex.
b. Spherical mirrors are made by grinding and polishing flat glass into a curved surface. A reflective coating is applied either on the inner or outer side; the placement determines whether it becomes concave or convex.
c. A concave mirror reflects light inward. When an object is placed close to it, the reflected rays diverge in such a way that they appear to come from a larger, erect image. This property allows concave mirrors to magnify objects.

OR

The inner surface of a spoon curves inward, like a concave mirror, and can show magnified or inverted images. The outer surface curves outward, like a convex mirror, producing only smaller, erect images. This difference is due to the direction of curvature.

57. a. A convex lens is also called a converging lens.
b. A convex lens is thicker at the middle and thinner at the edges, while a concave lens is thinner at the middle and thicker at the edges. This difference in shape determines their optical behavior.
c. A convex lens bends parallel light rays towards a single point, bringing them together, hence it is called a converging lens. A concave lens, on the other hand, spreads parallel rays outward, making them appear to diverge from a point, so it is called a diverging lens.

OR

Mirrors form images by reflecting light, whereas lenses form images by refracting light. In mirrors, the light bounces back, while in lenses, it passes through and bends. This makes plane mirrors form same-sized images, but convex and concave lenses either magnify or diminish objects depending on their type.

58. a. A convex mirror always forms a smaller, erect image.
b. When an object is near a concave mirror, the image is erect and enlarged. As the object moves farther, the image becomes inverted and gradually smaller, showing that distance affects concave mirror image characteristics.
c. Plane mirrors always form erect images of the same size with lateral inversion. Concave mirrors form enlarged, erect images when objects are near, but inverted and smaller ones when objects are farther. Convex mirrors always form erect, diminished images and provide a wide field of view.

OR

Convex mirrors always form small, erect images and cover a wide field of view. This allows drivers to see more traffic behind them and around corners. They are installed in vehicles, intersections, and stores to ensure safety and surveillance.

59.
 - The first law says that the angle of incidence equals the angle of reflection, and this holds true for every ray on the mirror's surface. The second law says that the incident ray, the normal at the point of incidence, and the reflected ray all lie in the same plane.
 - These laws apply to all mirrors, whether plane, concave, or convex. In concave mirrors, the curve makes the reflected rays converge. In convex mirrors, the curve makes the rays diverge. Even though their paths differ, each ray still follows the reflection laws exactly.
60.
 - Plane mirrors always form erect images that are the same size as the object, regardless of the object's distance. In contrast, the size and orientation of images in spherical mirrors depend on distance.
 - A concave mirror can produce enlarged or diminished images, which may be upright or inverted depending on the object's position. A convex mirror always produces small, upright images.
 - Lateral inversion happens in all mirror types. These differences arise because of the way the surfaces reflect light rays.
61. Spherical mirrors such as concave and convex mirrors form distinct images based on the object's distance from them. For concave mirrors, when the object is placed close, the image is erect and larger than the object. As the object is moved farther, the image becomes inverted and keeps decreasing in size. In contrast, a convex mirror always forms an erect and diminished image, meaning the size is smaller than the object. With increasing object distance, the image size slightly decreases but remains erect. This difference arises due to the unique reflective surface curvature of each mirror type, with concave mirrors converging light rays and convex mirrors diverging them.
62.
 - A concave mirror reflects parallel rays towards a single point called the focus, which means it converges light. A convex mirror reflects parallel rays outwards so that they spread apart, meaning it diverges light.
 - This happens because of the way the curved surfaces bend the paths of the light rays. In concave mirrors, the inward curve bends light inward. In convex mirrors, the outward curve bends light away from each other. This property is important in deciding their uses in real life.
63. A metallic spoon can simulate both concave and convex mirrors due to its double curved surface. The inner side of the spoon, which curves inwards, behaves like a concave mirror. When you look at your reflection in the inner part, you'll notice the image appears inverted and larger when very close. As you move the spoon away, the image becomes smaller and remains inverted- a typical trait of concave mirrors. The spoon's outer side acts as a convex mirror, displaying a smaller, erect image no matter the distance. These qualities provide everyday examples of the fundamental properties of spherical mirrors used in scientific learning and practical applications.
64. Fill in the blanks:
- (a) incidence
 - (b) Convex
 - (c) concave lens
 - (d) Concave
 - (e) diverging
 - (f) convex lens
 - (g) Convex
 - (h) Reflecting
 - (i) Larger
 - (j) enlarged (erect)