1. Two balls are released from rest on a curved track. Which ball will reach the bottom end first? (Assume the track is frictionless.)

2. Two balls, A and B, are released from rest at the top of the track. Ball A has twice the mass of ball B. Which ball will reach the bottom first? (Assume the track is frictionless.)

3. A solid sphere and a hollow sphere are released from the same height. Which one will reach the bottom first? (Assume the track is frictionless.)

4. A wave propagates on a string with an amplitude of 2 cm and a wavelength of 1 m. The displacement at x = 0 and t = 0 is y = 0. What is the displacement at x = 0.5 m and t = 0.5 s if the wave speed is 1 m/s?

5. Which gas in the following has the highest average speed at room temperature?

   a. 
   b. 
   c. 
   d. 
   e. 

6. A solid cylinder is at rest in a fluid. Will it move, slow down, stay at rest, or speed up? Describe the forces acting on the cylinder.

7. A satellite is in a circular orbit at an altitude of 200 km above the Earth's surface. What is the period of the satellite's orbit?
2. A beam of blue light and a beam of red light are on a surface.
(a) Which beam is the green beam?
(b) Which beam is the red beam?
(c) Which beam is the blue beam?
(d) Which beam is the shortest?
(e) Which beam is the longest?

25. A beam of blue light and a beam of red light are on a surface. Which beam is the green beam between the two beams?
(a) A beam of blue light and a beam of red light are on a surface. Which beam is the green beam between the two beams?
(b) A beam of blue light and a beam of red light are on a surface. Which beam is the green beam between the two beams?
(c) A beam of blue light and a beam of red light are on a surface. Which beam is the green beam between the two beams?
(d) A beam of blue light and a beam of red light are on a surface. Which beam is the green beam between the two beams?
(e) A beam of blue light and a beam of red light are on a surface. Which beam is the green beam between the two beams?

26. Which type of light is the green light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

27. Which type of light is the red light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

28. Which type of light is the blue light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

29. Which type of light is the green light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

30. Which type of light is the red light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

31. Which type of light is the blue light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

32. Which type of light is the green light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

33. Which type of light is the red light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

34. Which type of light is the blue light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

35. Which type of light is the green light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

36. Which type of light is the red light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

37. Which type of light is the blue light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

38. Which type of light is the green light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

39. Which type of light is the red light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light

40. Which type of light is the blue light?
(a) Monochromatic light
(b) Polychromatic light
(c) Monochromatic and polychromatic light
(d) Monochromatic and non-polarized light
(e) Polychromatic and polarized light