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Optics

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|  |  |  | 13  C | L | E | A | R |  | 14  P | L | A | N | E |  | A |  |  | 15  S |  | 16  O | B | J | E | C | T | 17  I | V | E |  |
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|  |  |  | 18  C | I | L | I | A | R | Y |  | 19  R | E | F | R | A | C | T | I | N | G |  |  |  | L |  | C |  |  |  |
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|  |  |  | 20  R | E | F | L | E | C | T | 21  I | N | G |  |  | A |  |  | M |  |  |  | 22  C | O | N | V | E | X |  |  |
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|  |  |  | 23  D | I | S | P | E | R | S | I | O | N |  |  | T |  |  | L |  |  |  | 24  T |  |  |  | 25  S | U | N |  |
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| **Across**  **2.** Another word for nearsightedness  **4.**  Allows no light to get through.  **6.** Waves where the particles of the medium vibrate with an up and down motion.  **7.** The \_\_\_ spot is where the optic nerve leaves the retina.  **13.** The aqueous humour is the \_\_\_\_fluid, that fills the front part of the eyeball.  **14.** Your image will be upright, but much smaller than what you normally see in this kind of mirror.  **16.** The \_\_\_\_\_lens in a telescope focuses the light to a point in front of the eyepiece.  **18.** The \_\_\_\_\_body is a circular muscle that enables the lens to change shape for focusing.  **19.**  A type of optical telescope that uses a lens as its objective to form an image.  **20.** Is an optical telescope which uses curved mirrors that reflect light and form an image.  **22.** A lens that makes light rays come together is called a \_\_\_\_\_lens.  **23.** When the sunlight passes from the air through rain droplets before reaching your eyes, what is this called?  **25.** Where does the energy of the electromagnetic spectrum come from?  **26.** Which rays are the highest forms of electromagnetic radiation?  **28.** The pupil gets\_\_\_\_in bright light.  **29.** Images are formed behind the retina, not on it, and this causes close-up images to be blurry.  **30.** The ability to let light rays in. | **Down**  **1.** Different \_\_\_\_\_\_\_of light have different wavelengths.  **3.** ,Light can travel in a straight line just like \_\_\_\_\_.  **5.** These lenses make light spread apart.  **8.** What kind of wave can you see on the water on a windy day?  **9.** Concave mirrors are also called \_\_\_\_\_\_\_\_\_mirrors  **10.** With refraction of light no image is formed when the object is at the\_\_\_\_\_point.  **11.** The most common cause of blindness  **12.** A \_\_\_\_\_and dark-coloured surface will absorb light the most.  **15.** What is the branch of science called that deals with the study of waves that travel through the Earth?  **17.** ,As the wavelength gets shorter, both the frequency and energy \_\_\_\_\_\_\_.  **21.** The coloured part of the eye.  **24.** Light can partially get through..  **27.** The \_\_\_\_\_is a layer of blood vessels that nourishes the eye. |