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| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Light and sound

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|  |  |  |  |  |  |  |  |  |  |  |  |  | M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 2  S | P | E | E | D | O | F | S | O | U | N | D |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 3  A |  |  |  |  |  | L |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | 4  R |  | B |  |  |  |  |  | I |  |  |  |  |  |  |  |  |  |  |  | 5  D |  |  |  |  |
|  |  |  | 6  T | R | A | N | S | L | U | C | E | N | T |  |  | 7  C | O | M | P | R | E | S | S | I | O | N |  |  |  |
|  |  |  |  |  | R |  | O |  |  |  |  |  | U |  | 8  R |  |  |  |  |  |  |  |  |  | P |  |  |  |  |
|  |  |  |  |  | E |  | R |  |  | 9  L | O | U | D | N | E | S | S |  | 10  P |  |  |  |  |  | P |  |  |  |  |
|  |  |  |  |  | F |  | P |  | 11  O |  |  |  | E |  | F |  |  |  | R |  |  |  |  |  | L |  |  |  |  |
|  |  |  |  |  | R |  | T |  | P |  |  |  |  |  | L |  |  | 12  P | I | T | C | H |  |  | E |  |  |  |  |
|  |  |  |  |  | A |  | I |  | A |  |  |  |  |  | E |  | 13  S |  | S |  |  |  |  |  | R |  |  |  |  |
|  |  |  |  | 14  E | C | H | O |  | Q |  | 15  S | O | N | I | C | B | O | O | M |  |  |  |  |  | E |  |  |  |  |
|  |  |  |  |  | T |  | N |  | U |  |  |  |  |  | T |  | U |  |  |  |  |  |  |  | F |  |  |  |  |
|  |  |  |  |  | I |  |  | 16  R | E | F | R | A | C | T | I | O | N |  |  |  |  |  |  |  | F |  |  |  |  |
|  |  |  |  |  | O |  |  |  |  |  |  |  |  |  | O |  | D |  |  |  | 17  F |  |  |  | E |  |  |  |  |
|  |  |  |  |  | N |  |  |  |  |  | 18  D |  |  |  | N |  | W |  |  |  | R |  |  |  | C |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | E |  |  |  |  | 19  W | A | V | E | L | E | N | G | H | T | H |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | C |  |  |  |  |  | V |  |  |  | Q |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 20  V | I | S | I | B | L | E | 21  S | P | E | C | T | R | U | M |  |  |  |  |  |  |  |
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|  |  |  |  | 22  T | R | A | S | P | A | R | E | N | T |  | N |  |  |  |  |  | C |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  | 23  C | O | M | P | R | E | S | S | I | O | N |  |  |  |  |  |  |  |  |  |

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| **Across**  **2.** What is the speed at which a sound wave travels?  **6.** It allows some light to pass through; blurry image can be seen.  **7.** What is the area of a sound wave where the air is pused together?  **9.** What is the measure of the amount of sound energy reaching your ears?  **12.** It is the measure of how high or low the sound is.  **14.** It is a sound reflection.  **15.** What is a large, quick air pressure increase followed by a large quick decrease. An object moving faster than the speed of sound dose this. We hear a large "BOOM" when this happens.  **16.** It is the bending of the path of light when it moves from one kind of matter to another  **19.** It is the distance in a straight line from one place on a ripple to the same place on the next ripple.  **20.** What is the range of light that people can see is?  **22.** What allows most light to pass throgh; clear image can be seen  **23.** Itis the part of a sound wave where that molecules are close together. | **Down**  **1.** What is the greatest distance from the top of a sound wave to the bottom of the wave. The more energy a wave carries, the greater its amplitude.  **3.** The stoping of light when it hits the wall is?  **4.** What is the part of a sound wave where the molecules are spread apart?  **5.** It is the change in frequency and pitch as a source of sound waves moves toward or away from you.  **8.** What is the boucing of light?  **10.** It is a soild object that bends light; not a lens  **11.** What is reflecting or absorbing all light; no image can be seen  **13.** It is quickly moving in the areas of high and low pressures.  **17.** What is the number of times an object viberates per second?  **18.** It is a unit for measuring loudness.  **21.** A vibration you can hear is? |