



COLEGIO NACIONES UNIDAS I.E.D.
WORKSHOP THIRD TERM
PHYSICS 6th

This workshop must be copied and developed in the corresponding notebook
DELIVERY DATE NOVEMBER 8th

NAME _____ GRADE _____ DATE _____

SOLVE THE FOLLOWING PROBLEMS. YOU CAN USE THE ATTACHED TABLE TO FIND THE ANSWER

1. Maria walks 2 kilometers to the store. How many meters does she walk in total?
2. Andrea has a tape measure that shows measurements in centimeters. How many meters are in 540 centimeters?
3. Pedro has a table that is 120 centimeters long. How many meters long is the table?

Km	Hm	Dam	M	dm	cm	mm

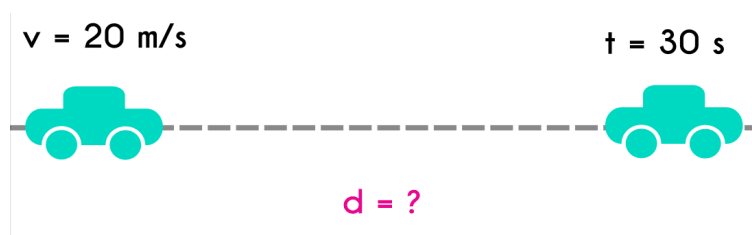
4. A car travels 150 kilometers in 2 hours. What is its average speed?
5. An airplane flies straight south at a speed of 12 km/min for 15 minutes. What is the total distance traveled by the airplane in this time?



DATO	VALOR
Velocidad	12 Km/min
Tiempo	15 minutos
Dirección	Sur

¿Cuál es la distancia?

$$V = \frac{D}{T} \rightarrow D = T \times V$$



6. The distance traveled by the car is

READ THE TEXT AND ANSWER THE QUESTIONS 7, 8, 9 AND 10

Sound Waves

Sound waves are vibrations that travel through air (or other materials) and allow us to hear sounds. When something makes a sound, like a guitar or a drum, that object vibrates. These vibrations cause the air particles around it to move, creating waves.

Properties of Sound Waves

- ✓ Frequency: This is the number of times a wave vibrates in one second. It is measured in hertz (Hz). The higher the frequency, the sharper the sound. For example, a bird's song has a high frequency, while a lion's roar has a low frequency.
- ✓ Amplitude: This refers to the strength of the vibration. A greater amplitude means a louder sound, while a smaller amplitude means a softer sound. Think of a drum: if you hit it hard, it sounds loud; if you hit it softly, it sounds quiet.
- ✓ Wavelength: This is the distance between two consecutive points of a wave, like two crests. Wavelength is related to frequency: waves with high frequency have short wavelengths.

Characteristics of Sound Waves

- Reflection: Sound waves can bounce off surfaces, like when you shout in an empty space and hear an echo.
- Refraction: This happens when sound waves change direction when passing from one material to another, like when sound travels from air to water.
- Interference: When two waves meet, they can combine or cancel each other out. This can create louder or softer sounds.

Sound waves are an essential part of our lives. They allow us to enjoy music, communicate, and hear what is around us. The next time you listen to your favorite song, think about the sound waves that make it possible!

7. What would happen if the amplitude of a sound wave is very low?
8. If a sound is heard louder in a closed space than in an open one, which property of sound waves might be at play?
9. How does frequency affect the perception of sounds?
10. If two sound waves meet and create a louder sound, what phenomenon are they experiencing?