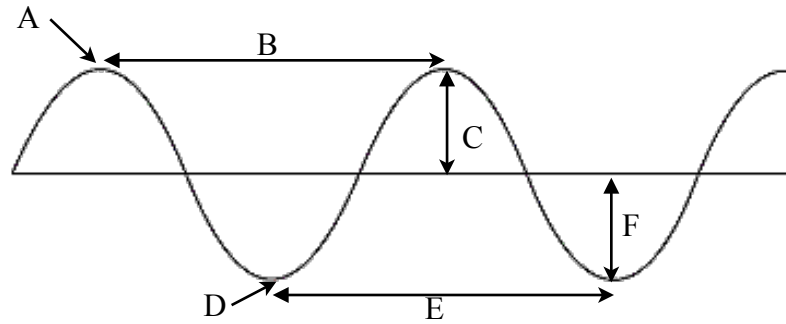


Name: \_\_\_\_\_

Date: \_\_\_\_\_

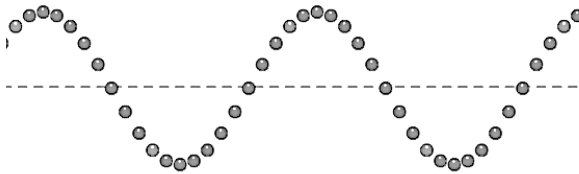
### Waves Worksheet

- A: \_\_\_\_\_
- B: \_\_\_\_\_
- C: \_\_\_\_\_
- D: \_\_\_\_\_
- E: \_\_\_\_\_
- F: \_\_\_\_\_

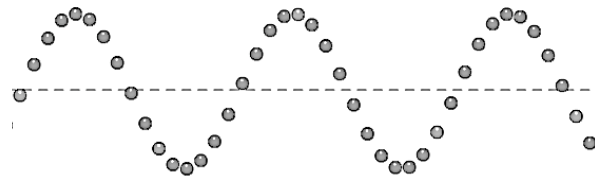


### Frequency

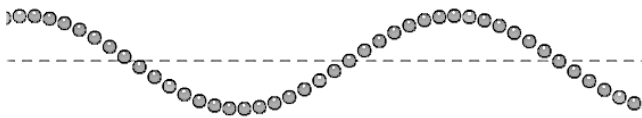
Wave 1:



Wave 2:



Wave 3:



1. How many wavelengths long is Wave 1?
2. How many wavelengths long is Wave 2?
3. How many wavelengths long is Wave 3?
4. Which wave has the highest frequency?
5. Which wave has the lowest frequency?
6. What is the definition of frequency?
7. How can you tell by looking at it if a wave has high or low frequency?

### Frequency Connection

There are three members of a family. The dad has a deep, low voice. The mom has a medium-high voice, and the baby has the highest voice.

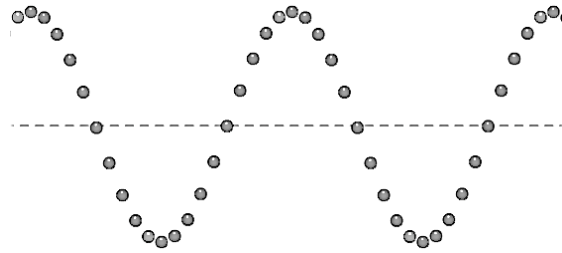
8. Which wave belongs to the dad's voice? \_\_\_\_\_
9. Which wave belongs to the mom's voice? \_\_\_\_\_
10. Which wave belongs to the baby's voice? \_\_\_\_\_

## *Amplitude*

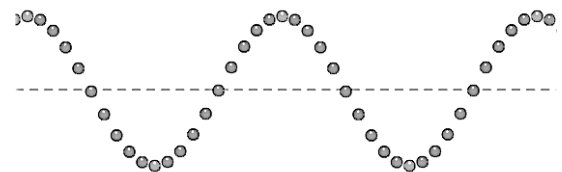
Wave 4:



Wave 5:



Wave 6:



1. Which wave has the highest amplitude?
2. Which wave has the lowest amplitude?
3. Use a ruler and measure the amplitude of Wave 5:
4. What is the definition of amplitude?
5. How can you tell by looking at it if a wave has high or low amplitude?

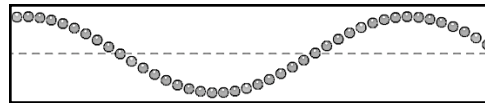
## *Amplitude Connection*

Juan is playing the piano. The music starts off at *meso-forte* (medium high volume). It then *crescendos* into *forte* (loud) and Juan plays dramatically. The music ends at *piano* (quietly) with a sweet melody.

6. Which wave represents the music at the beginning? \_\_\_\_\_
7. Which wave represents the music in the middle? \_\_\_\_\_
8. Which wave represents the music at the end? \_\_\_\_\_

## *Final Waves Goodbye*

Compare waves A-D by both amplitude and frequency to the Standard Wave. (Higher/Lower/Same)



Standard Wave

<p>A</p> <p>_____ Amplitude; _____ Frequency</p>	<p>B</p> <p>_____ Amplitude; _____ Frequency</p>
<p>C</p> <p>_____ Amplitude; _____ Frequency</p>	<p>D</p> <p>_____ Amplitude; _____ Frequency</p>