Name:_____ Date:_____

Waves Worksheet

A:_____

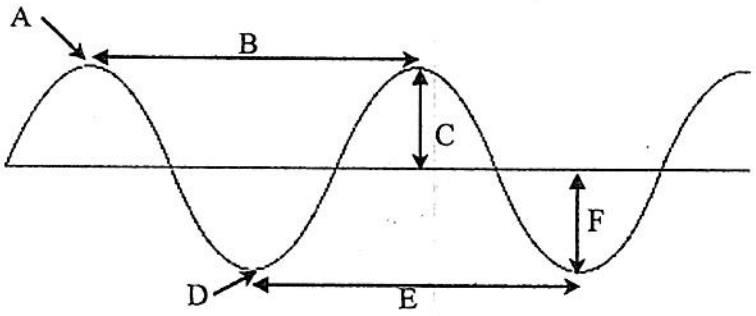
B:_____

C:_____

D:_____

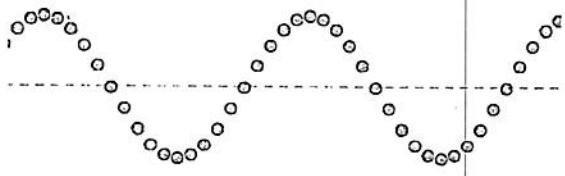
E:_____

F:_____

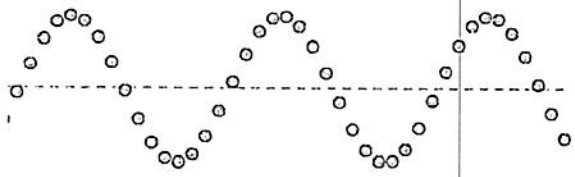


Frequency

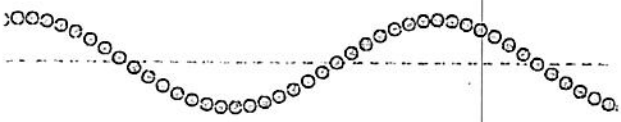
Wave 1:



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?_____

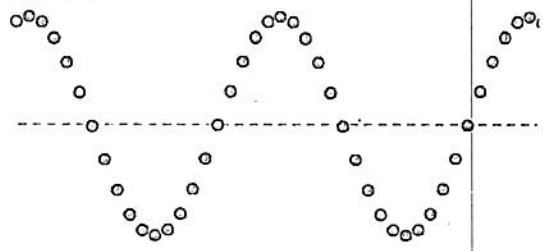
9. Which wave belongs to the mom's voice?_____

10. Which wave belongs to the baby's voice?_____

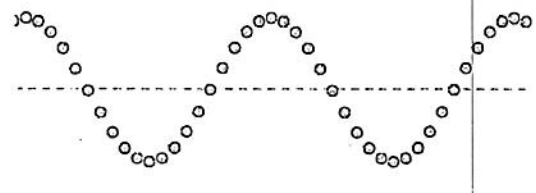
Amplitude

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 of 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.

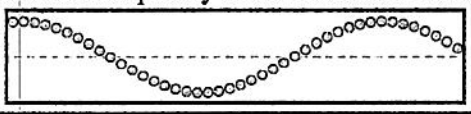
6. Which wave represents the music at the beginning?_____

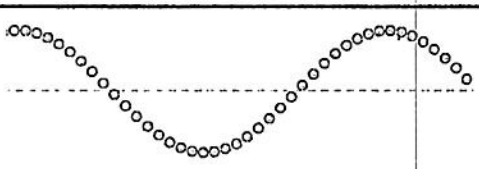
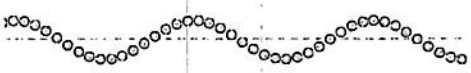
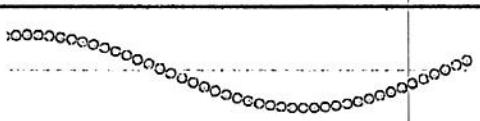
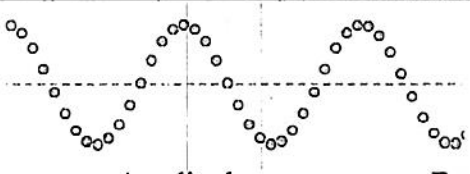
7. Which wave represents the music in the middle?_____

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

A  _____Amplitude; _____Frequency	B  _____Amplitude; _____Frequency
C  _____Amplitude; _____Frequency	D  _____Amplitude; _____Frequency