

Name: _____

NB p. _____

Forces & Waves Study Guide

Single/science

1. List Newton's 3 Laws of motion in correct order:

--
--
--

2. Define each:

Force—

Inertia—

Acceleration—

Momentum—

3. Explain how to calculate each:

--net force in opposite directions

--net force in the same direction

4. List 2 over-all types of waves & list examples of each.

--
--

5. List two types of mechanical waves and draw each

6. Draw a wave & label each: crest, trough, amplitude, wavelength

7. Define each:

--wave frequency

--Hertz

--reflection

--refraction

--diffraction

--constructive interference

--destructive interference

8. 1 Hz = _____

9. List 7 types of electromagnetic waves in correct order from longest wavelength to shortest wavelength:

- | | |
|----|----|
| 1. | 5. |
| 2. | 6. |
| 3. | 7. |
| 4. | |

10. List the 7 colors of visible light in correct order from longest wavelength to shortest wavelength:

-
-
-
-
-
-
-

11. Observe the following two waves and answer each:

Which carries more energy if the waves are mechanical?

Which carries more energy if the waves are electromagnetic?

Which has a larger amplitude?

Which has a larger frequency?

If they are sound waves, which has higher pitch?

If they are sound waves, which has lower pitch?

Which has the greater wavelength?

Which has the greater wave height?

What is the frequency of wave A?

What is the frequency of wave B?