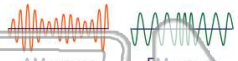
# Light

Sci H

Name_____ Class_____ Date_____

1 In the diagrams below, _____.




**A** AM waves are being frequency modulated
**B** FM waves are being amplitude modulated
**C** AM and FM waves look the same
**D** AM waves are amplitude modulated

2 Using the diagram below, determine how the FM waves **look different** than the AM waves.


**A** FM waves show areas where the wavelengths are different
**B** AM waves show areas where the wavelengths are different
**C** AM waves vary in their frequencies
**D** FM frequencies are the same

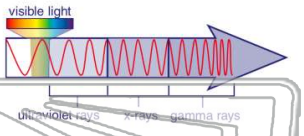
3 Why do **FM radio** broadcasts **sound better** than AM radio broadcasts?

4 In the picture below, a policeman is beaming a **radar gun** on moving traffic. What **kind of waves** are used by the

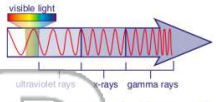



5

7




**A** ultraviolet rays
**B** orange light
**C** X-rays
**D** gamma rays




**A** more amplitude than ultraviolet rays
**B** lower frequencies than ultraviolet rays
**C** higher frequencies than ultraviolet rays
**D** less energy than ultraviolet rays

9 **Ultraviolet rays** can cause a person's skin to tan. What is another possible effect of ultraviolet rays?

**A** common colds
**B** skin allergies
**C** skin cancer
**D** acne


10 Using the chart below, determine which type of broadcast can send out the **highest frequency**.

**A** UHF
**B** VHF
**C** AM
**D** FM

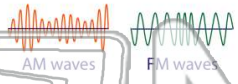
| Broadcast Frequencies | |
|---|---|
| **Type of Broadcast** | **Frequency Range** |
| AM radio broadcast | 535 kHz to 1,605 kHz |
| VHF television | 54 MHz to 216 MHz |
| FM radio broadcast | 88 MHz to 108 MHz |
| UHF television | 470 MHz to 806 MHz |

# Light

Sci H

Name_____ Class_____ Date_____

1 In the diagrams below, _____.




A AM waves are being frequency modulated
B FM waves are being amplitude modulated
C AM and FM waves look the same
D AM waves are amplitude modulated

D

2 Using the diagram below, determine how the FM waves **look different** than the AM waves.


A FM waves show areas where the wavelengths are different
B AM waves show areas where the wavelengths are different
C AM waves vary in their frequencies
D FM frequencies are the same

A

3 Why do **FM radio** broadcasts **sound better** than AM radio broadcasts?

4 In the picture below, a policeman is beaming a **radar gun** on moving traffic. What **kind of waves** are used by the

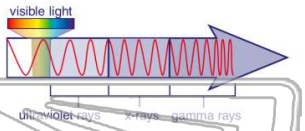
C




5

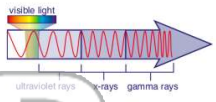
C

7




A

A ultraviolet rays
B orange light
C X-rays
D gamma rays




C

A more amplitude than ultraviolet rays
B lower frequencies than ultraviolet rays
C higher frequencies than ultraviolet rays
D less energy than ultraviolet rays

9 **Ultraviolet rays** can cause a person's skin to tan. What is another possible effect of ultraviolet rays?

A common colds
B skin allergies
C skin cancer
D acne


C

10 Using the chart below, determine which type of broadcast can send out the **highest frequency**.

A UHF
B VHF
C AM
D FM

| Broadcast Frequencies | |
|---|---|
| Type of Broadcast | Frequency Range |
| AM radio broadcast | 535 kHz to 1,605 kHz |
| VHF television | 54 MHz to 216 MHz |
| FM radio broadcast | 88 MHz to 108 MHz |
| UHF television | 470 MHz to 806 MHz |

A