

**23** The table shows the wavelengths of five electromagnetic waves.

Which row correctly identifies the principal radiation for each of these wavelengths?

	$10^{-14}$ m	$10^{-10}$ m	$10^{-6}$ m	$10^{-2}$ m	$10^2$ m
<b>A</b>	gamma ray	X-ray	infra-red	microwave	radio wave
<b>B</b>	radio wave	microwave	infra-red	X-ray	gamma ray
<b>C</b>	radio wave	microwave	ultraviolet	infra-red	X-ray
<b>D</b>	X-ray	infra-red	ultraviolet	microwave	radio wave

**24** The diagram shows a cross-section of the Earth's atmosphere. A horizontal line represents the surface of the Earth. The atmosphere is divided into layers: the troposphere, stratosphere, mesosphere, and thermosphere. The ionosphere is shown as a region within the thermosphere. A radio wave is shown traveling from the surface of the Earth, reflecting off the ionosphere, and returning to the surface. This illustrates how the ionosphere can reflect radio waves, allowing them to travel long distances.