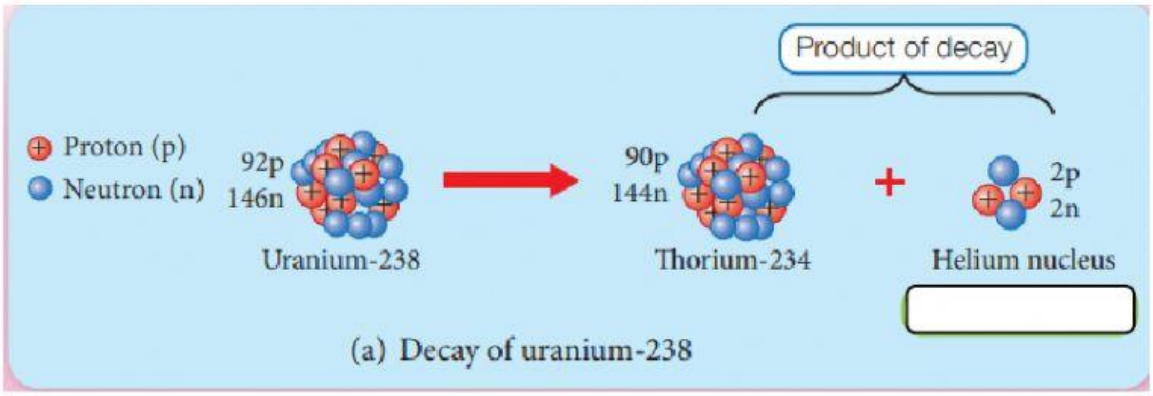
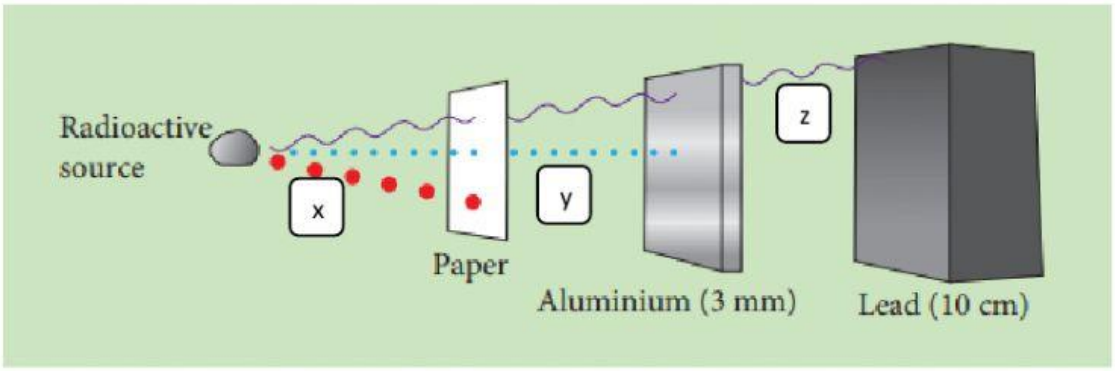
CHAPTER 8: RADIOACTIVITY

1) Diagram below shows decaying process of uranium-238 that emits radioactive radiation. Choose the correct type of radiation emitted by this decaying process.



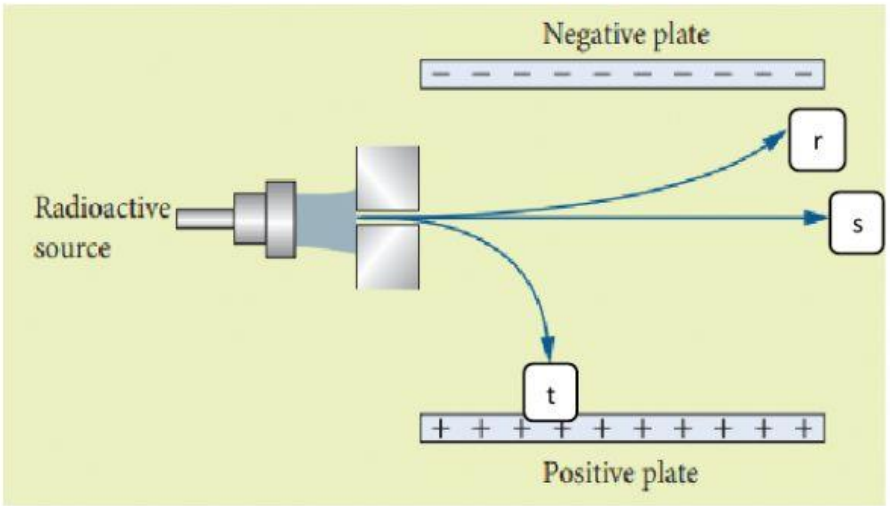
2) Diagram below shows the penetration power by 3 types of radioactive radiation.

Name x, y and z.



x: _____ y: _____ z: _____

3) Diagram below shows the deflection of radiation by electric field. Match the type of radiation given to the correct box below.



alpha particles, α

beta particles, β

gamma particles, γ

(b) In the school compound

4) Based on the diagram, name the device used to measure the dose rate of background radiation.

5) What is the safe level of background radiation?

USES OF RADIOACTIVE RADIATION

Identify the type of radioactive substance/ type of radiation that commonly used in our daily life.

1) Archeologists use this radioactive substance to determine the age of fossil and artifacts.

2) In agriculture, they use this radioactive substance to determine the absorption rate of phosphate fertiliser in plants.

3) In medical field, they use this radioactive substance to kill cancer cells.

ATOM AND NUCLEUS

Atom consists of 3 subatomic particles namely proton, electron and neutron.

Table 1

Particle	Number of protons	Number of electrons
P	4	4
Q	12	10
R	17	18
S	29	27
T	35	36

Based on Table 1,

1) Which particle is a positive ion? _____

2) Which particle is a negative ion? _____

3) Which particle is a neutral? _____