



Oxford Cambridge and RSA

GCSE Physics B (Twenty First Century Science)

J259/01 Breadth in Physics (Foundation Tier)

Question Set 29

Multiple Choice Questions

- 1 Kareem researches nuclear fission and nuclear fusion.
- (a) (i) Complete the sentence to explain what is meant by nuclear fission.
Put a **(ring)** around the correct answer.
Fission is when nuclei **fuse / grow / shrink / split** to form smaller nuclei. [1]
- (ii) Complete the sentence to explain what causes nuclear fission.
Put a **(ring)** around the correct answer.
Fission happens because some nuclei are **negative / positive / unstable / stable**. [1]
- (b) During nuclear **fission**, energy is released in two main forms.
How is the energy released?
Tick (✓) **two** boxes.
- | | |
|---|-------------------------------------|
| Elastic potential energy of the new particles | <input type="checkbox"/> |
| Gamma radiation | <input checked="" type="checkbox"/> |
| Gravitational potential energy of the new particles | <input type="checkbox"/> |
| Kinetic energy of the new particles | <input checked="" type="checkbox"/> |
| Radio waves | <input type="checkbox"/> |
| Sound waves | <input type="checkbox"/> |
- [2]
- (c) (i) Describe what happens during nuclear **fusion**. [2]
Smaller nuclei fuse to form larger nuclei
- (ii) During nuclear **fusion** some of the mass is lost. [1]
What is this mass converted into?
Energy

Total Marks for Question Set 29: 7

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