

Unit title	Radiation Game
Topic	Atomic and Nuclear
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Aims of Unit	.The Unit requires that students select key words from the topic of radioactive materials and construct short sentences including the chosen word.
Indicative content	Radioactivity, nuclear decay, safety issues concerned with nuclear radiation.
Resources needed	Stop clock, cards with key words written on them (provided).
Teachers notes	<p>A good Starter or Plenary activity for students 14+</p> <p>Time about 15 minutes</p> <p>This is an assessment which is ideally used as a plenary activity. It will allow the observer and peers to give feedback on the pupils knowledge of key words used in a radio-activity module.</p> <p>The task is designed to encourage pupils to define key words and be able to recall these definitions quickly.</p>

Date:	Topic: Radio-activity key word game	Time:	Class: Key stage 4
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SEN pupils

Gifted and Talented

Class Room Support

Equipment needed for this activity:

Pupils will need the cards with key words written on them and a stop watch.

Health and Safety:

There are no health and safety issues involved in this task.

Learning outcomes for this activity

This is an assessment which is ideally used as a plenary activity. It will allow the observer and peers to give feedback on the pupils knowledge of key words used in a radio-activity module.

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Starter Activity

Main Activity

Plenary Activity

In this activity pupils should work in groups of 3.

Before the activity the card sheets should be printed off and cut out, more cards can be added or words changed as required.

In each group of 3 there will be a timekeeper, a judge and a subject.

The subject selects a card from the pack and is given 10 seconds to define the key word as best they can, this is repeated several times before the roles rotate within the group and another member becomes the subject. The judge in the group must decide if the definition is correct.

Time allocated 10 minutes.

Reflections on the lesson

The Radiation Game

The class is divided into groups of three for this game. In each group there is player 1, player 2, and the third student is a judge. The judge has to have some factsheets about radiation, but the teacher must be able to act as supreme judge to issue advice as required.

Game Rules:

1. The judge should shuffle and deal the cards so that each player has ten cards. The judge should have a stopwatch.
2. Each player must place their cards face down on the table in a pile, so they cannot see which cards they have or the order that the cards are in.
3. Player 1 takes a card from the pile and places it face up on the table and then has 10 seconds to make a sentence that contains that word.
4. The judge times the 10 seconds and decides whether or not the answer is correct. If need be the judge can refer to the supreme judge.
5. If a correct answer is given, the judge takes the card. If player 1 cannot think of a sentence, or the sentence does not use the word correctly, player 1 keeps the card and puts it on the bottom of the pile.
6. Player 2 repeats steps 3-5, then it is player 1's turn again.
7. The first player to have no cards left is the winner.

Example of Card

NUCLEUS

Other words that could be used include:

- Atoms
- Stable
- Radioactive waste
- Radon
- Granite
- Unstable
- Exposure
- Uranium
- Air

- Half-life
- Rocks
- Nuclear
- Sievert
- Decay
- Alpha
- Radioactivity
- Lead
- Becquerel
- Gamma

Radioactive
waste

Radon

Atoms

Granite

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Alpha

Beta

Gamma

Lead

Becquerel

Radioactivity

Isotope