

E'S OF PLANNING

@HThompson

LESSON:

PERIOD:

GROUP:

DATE:



The BIG Picture

Explain the extent your evidence supports the conclusion that the unknown substance is an element.

LEARNING OUTCOMES:

- Describe the evidence of a chemical reaction that you observed/
- Explain what happened to mass and how this supports or doesn't support that the substance is an element.
- Apply your understanding to another example and make predictions based on your knowledge

KEY RESOURCES:

- 4 x greenium powder,
- 4 x balances
- Spatulars
- Clay triangles, tripods, bunsens
- Crucibles and lids
- Tongs
- DEMO: Limewater, delivery tube acid, boiling tubes x 2, test tube rack!

ELICIT: What do they already know?

True and False statements about elements and not elements. Students have to decide whether the statements are true or false..

TW

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ENGAGE: Why is this lesson interesting?

Take feedback. Direct questions to discuss. Introduce and set the scene. Need to work out whether greenium is an element.

EP

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EXPLORE: What can they find out?

Quick demonstration. Students are going to heat greenium to see if it gains or loses mass on heating. Work in pairs Circulate to check understanding and discuss obs.

TM

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PLTS:



KEYWORDS:

Atom, element, reactive, carbon dioxide, decompose, copper oxide, copper carbonate, rearrange

LITERACY: Key word and sentence level

ICT:

NUMERACY: Subtraction

Differentiation

By outcome of level assessed task, directed questioning

SAFETY: Heating safety precautions, use goggles, do not touch hot objects

KEY Q'S:

Is greenium an element? How do you know?
Why did it lose mass? What might have happened?



EVALUATE: How much progress have they made?

Swap answers, Students mark each others work and then level it. They should come up with a WWW and an EBI. Share with the class.

RT

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EXPLAIN: Why is like that? Teacher input to formalise concept

Use PowerPoint to discuss findings, Ask key questions. Demonstrate that greenium is not a element because it gives off a gas. Discuss,

EP

5

ELABORATE: How can they apply this? Demonstrate learning

Students complete the questions from the level assessed task to explain their findings. . Apply to new situations.

IE

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EXTEND:

The level 7 question will extend students understanding of Key ideas.

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