### CurriculumVisions Lesson

Students: fill in next to the word answer and return the document for assessment.

Science Book: Changing materials (6D)

Pages 10-17

Everything here is based on our Curriculum Visions book Changing materials (6D).

In this segment, we are going to learn about changes that happens when water is added to some substances, using electricity to make changes and using acids to produce gas.

### Part 1

You will need to go to pages 10-11 of the book. Describe what happens when cement is mixed with water. Look around your school or neighbourhood - what is cement being used for? Why do you think it was used in those places?

# Answer.....

Crystals grow and surround the materials in the cement, holding them tightly in place.

Cement is used a lot in construction - buildings, etc. because it is important to use a strong material.

#### Part 2

Go to pages 12-13. What happens when a material rusts? Is it a reversible or irreversible change?

# Answer.....

The metal combines with oxygen and other gases in the air and the surface develops pits and bumps, and flakes of brittle rust form on the metal and eventually break off.

Irreversible

Will metal rust faster in damp air or dry air?

Answer......
Damp air

Which is more damaging to metal, rust or tarnish?

Answer.....

## Rust

Part 3
Go to pages 14-15

Draw a picture, with captions or explanations, that describes how electroplating works.

Students' own answer..... Students may like to use the image on page 14 or picture 2 on page 15 as templates.

Part 4
Go to pages 16-17

Describe what happens when vinegar is mixed with baking soda. (Hint: baking soda is similar to chalk.)

Answer.....

The vinegar is an acid and it will react with the baking soda to produce a gas.

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If you are interested in this topic continue to browse the book and watch our amazing videos. They start right on the book cover.