

All Characters Welcome

KS2 Science Fiction - Lesson 4

Evidence-Based Learning

Using simple stories to develop advanced learning skills

An extensive review of educational research has identified the 8 key **Evidence-Based Learning (EBL)** skills

Four of these EBL skills are developed in this lesson through *Science Fiction*

Collaboration

Thinking Skills

Self-Regulation

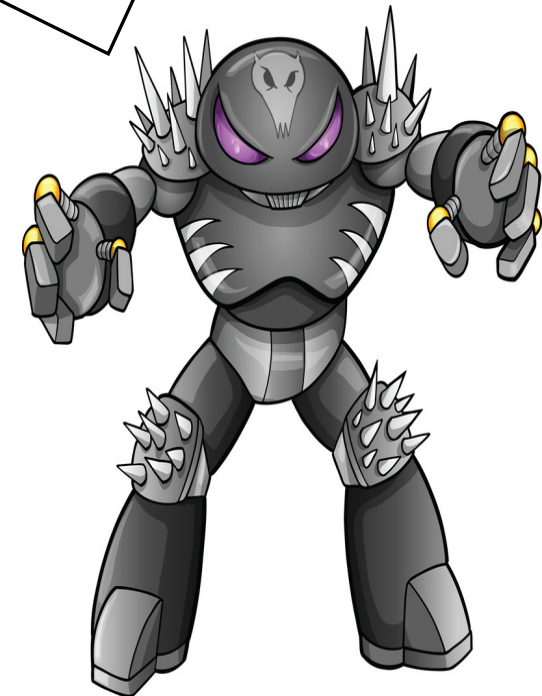
Peer Teaching



Activities in this lesson include:

learning about the need to be consistent when describing a character; looking at the four conventional ways of describing a character, identifying the characteristics of good and bad characters in science fiction stories and answering higher and lower order questions.

Anyone short of a partner to work with?



Our EBL resources will develop all eight key thinking and learning skills

Our EBL resources will develop the eight key thinking and learning skills identified by extensive educational research as necessary for developing the highest levels of thinking and learning.

The ideal vehicle with which to develop these eight key skills are simple stories because once pupils know a story well, it is possible for them to think about and manipulate that story in increasingly complex ways.



Our EBL resources will also develop teaching skills

This lesson also contains an overview of EBL plus a 5 minute evidence-based teacher CPD activity

What is Evidence-Based Teaching and Learning?

Evidence-based teaching and learning is based on the principle that teachers should use research to make informed decisions with regards to learning

*Evidence-based approaches to learning and teaching – Mar 2020
European University Association – eua.eu*

Contents

Lesson Content

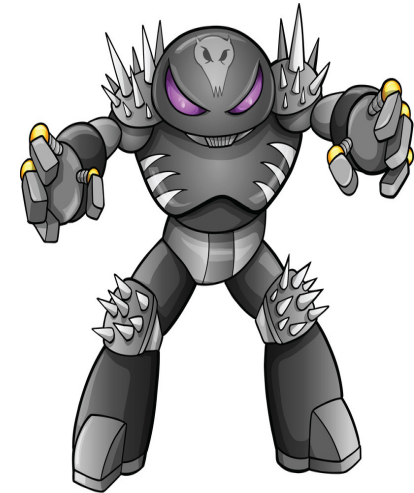
- Click on any heading to go there direct

Collaborative Thinking Skills Activity

Individual Self-Regulation Activity

Individual Peer Teaching Activity

Five-Minute CPD for Teachers: **Self-Regulation**



There is a 5 minute evidence-based CPD activity for teachers to add to their own skill set.



A different emoticon is used for each of the eight EBL skills to reinforce for pupils which skill they are currently learning.

Collaborative Thinking Skills Activity

Work with a partner. Working with a partner will help you to learn more because you can discuss the questions with your partner and work out the answers together.



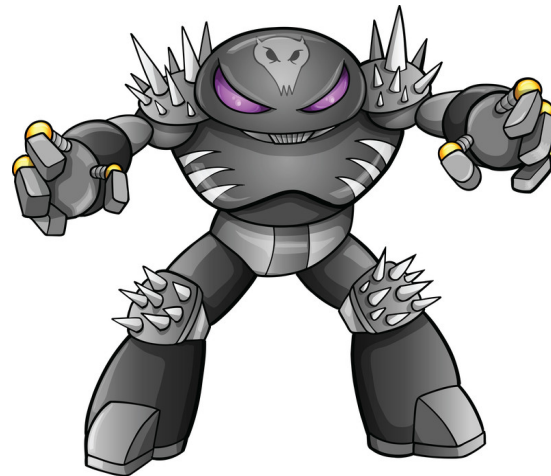
- It is a good idea to use **rules** when you work with a partner, as they help you work better together. One good rule for working with a partner is:

Listen carefully to what your partner says.

- Think of a rule of your **own** for working with a partner. Write this rule down and refer to it as you work together.

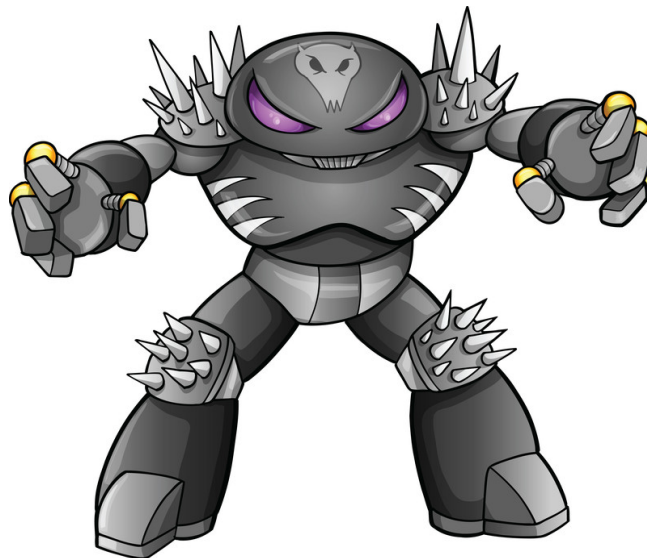
Now work with your partner. You can tell what a character in a story is like in these four ways:

1	What they look like
2	What they do or how they behave
3	What they say and the way they say it
4	How they think or feel



We can tell what characters are like by

how they **look**



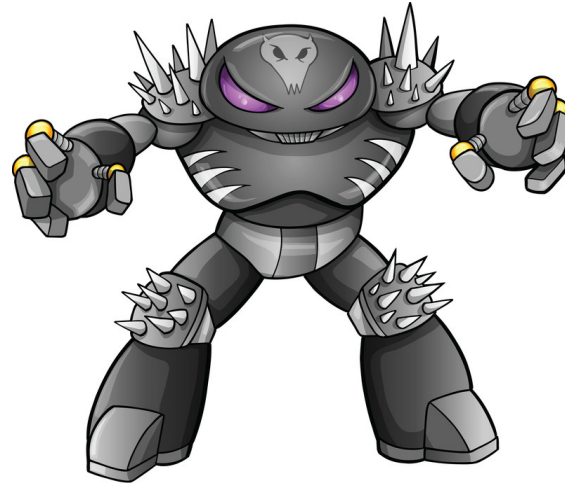
ZX1 was a nasty robot that looked really menacing with its sharp pointed spikes and its scary purple eyes.

1

How do we know what sort of robot ZX1 is by the way that it **looks**?

We can tell what characters are like by

what they **do** or how they **behave**



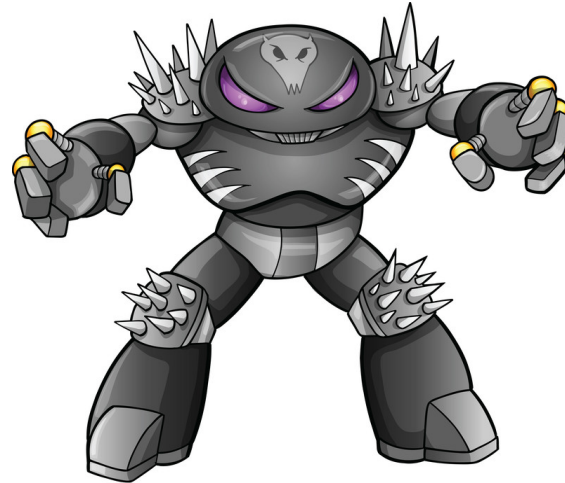
ZX1 was ruthless. It was a powerful and cruel robot that never showed any mercy.

2

How do we know what sort of robot ZX1 is by the way that it **behaves**?

We can tell what characters are like by

what they **say** and the **way** that they say it



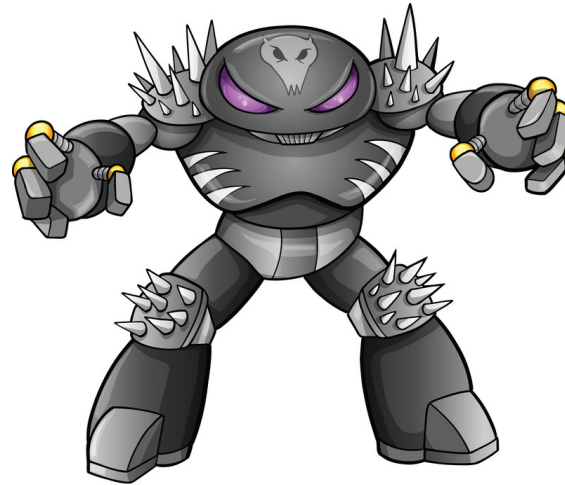
“Death to my enemies” said ZX1 in a booming and menacing metallic voice that was so loud that even the air seemed to shake.

3

How do we know what sort of robot ZX1 is by **what** it says and the **way** it says it?

We can tell what characters are like by

how they
think or **feel**



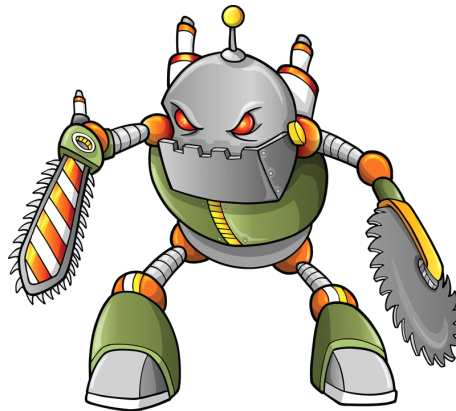
ZX1 was always thinking about revenge on his enemies and what he would do to anyone that tried to oppose him.

4

How do we know what sort of robot ZX1 is by what it **thinks** or **feels**?

When you describe a character you have to make the description consistent. This means that all the details should add up to what the character in your story is really like. This will make your character seem real to the reader because the reader will feel that they know him/her. To create a realistic character you need to show them behaving in a **consistent** way throughout your story.

This is Alpha:



5. If Alpha was in a science fiction story that you were writing, which **five** sentences below would you use to show that he was a **nasty** robot?

He looks after his friends.	He lends his oil to other robots.	He is always hiding the bolts of other robots.	He wants to fight battles more than anything else.	He never disagrees with other robots.
1	2	3	4	5
He loves his pet robot dog.	He never goes anywhere without his sharp saws.	He puts nasty comments on social media.	He likes to make friends wherever he goes.	He bullies other robots.
6	7	8	9	10

- Now look at this alien called Frozzy :



6. Write five things it might do that shows Frozzy is a **friendly** alien. One has been done for you.

Five things that show this is a friendly alien.				
Frozzy always takes Rufus for a nice long walk.				
a	b	c	d	e

We can tell what characters **are like** by:

7

What they **look** like



Does the way this character **looks** give you a clue as to what it is like?

yes

no

Explain why.

We can tell what characters are like by:

8

How they **behave** and what they **do**

There was nothing the two aliens liked more than dressing up as pirates and playing pirate games on deserted islands.



Does the way these characters **behave** give us a clue to what they are like?

yes

no

Explain why.

We can tell what characters are like by:

9

What they **say** and **how** they say it

*Cowbot has just arrived on Earth. He creaked with excitement as he said:
'I sure am sure looking forward to the robot fancy dress party!'*



Does what Cowbot **said** and the way it said it give us a clue as to what the robot will be like?

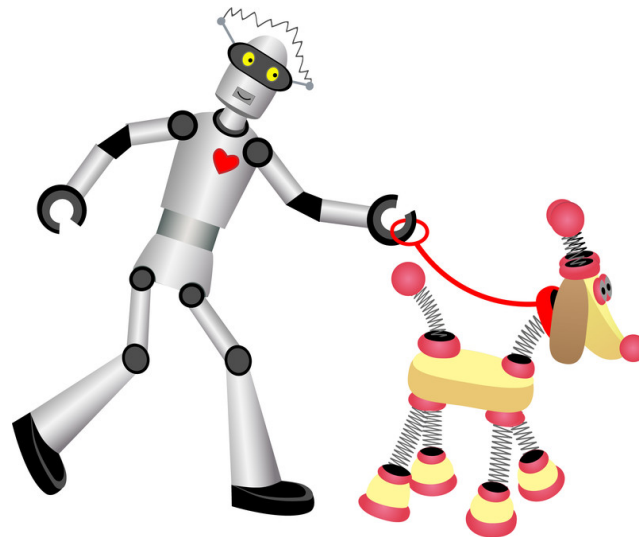
Explain why.

We can tell what characters are like by:

10

How they **think** or **feel**

Metallix's dog is off its food. Metallix feels so worried and upset about his dog that he is rushing home to ring the vet.



Does the way Metallix **feels** give us a clue to what Metallix will be like?

Explain why.

Individual Self-Regulation Activity

Work on your own. Self-regulated learners are the best learners. They use the best strategies for learning and they have the self-belief that they can learn.



Which four of these behaviours do you think would help you to become a self-regulated learner?

1	To like reading books.	
2	To have the right attitudes and behaviours to be effective learners.	
3	To always put their hand up before asking a question.	
4	To have the self-belief to start a task and feel that they will be able to finish it.	
5	To carry on working and not give up as soon as they get stuck.	
6	To work quietly and not keep asking the teacher questions.	
7	To check their work as they are working on a task.	
8	To ask for help from their partner on every question.	

Individual Peer Teaching Activity

You will learn more if you explain something to another pupil

When you explain something to your partner try to:

Explain it in your own words

Give examples (if possible)

Answer any questions

Summarise this topic for your partner:

There are four ways to describe a character.



Did explaining something to your partner help you to learn?









yes

no

Give a reason for your response.

Teacher Overview

The first table shows the eight EBL skills identified by research as key to learning. Each skill has its own icon. The second table shows the skills that were developed in *this* lesson and their purpose.

The eight EBL skills proven to maximise learning				This lesson has developed these EBL skills	
				thinking skills	to develop and consolidate higher and lower order thinking skills
Collaborative skills	Thinking skills	Peer Assessment skills	Peer Teaching skills	collaborative skills	to develop the most effective ways of working with peers
				self-regulation skills	to develop the highest levels of thinking with the most productive learning behaviours
Self-Assessment skills	Metacognitive skills	Self-Regulation skills	Independent Learning skills	peer teaching skills	to explain something to another pupil using their own words with examples and answering questions

Five-Minute CPD for Teachers: Self-Regulation

All eight EBL skills are research-driven.

An example of the research that supports the self-regulation used in this unit is:

“Self-regulated learners have the right thinking, strategies and behaviours”

Self-regulated learners will focus on a task and bring to it the right thinking, attitudes, strategies and behaviours to get that task done.

In doing this, they will have maximised the thinking and learning opportunities for the task and minimised any disruption their attitudes and behaviours might have caused.

Aspects of self-regulation such as attention, persistence, flexibility, motivation and confidence can all be improved as a result of effective teaching and learning practices.

Research Brief – Self-Regulated Learning 2009
www.dcsf.gov.uk

Five-Minute Evidence-Based CPD



A good question to ask yourself after using this EBL skill is “what aspects of self-regulation can ALL pupils in my class improve?”

As the research brief opposite makes clear 1) self-regulated learners maximise the thinking and learning opportunities for a task and 2) many aspects of self-regulation can be improved.

The aspects of self-regulation that can be readily improved are the ‘non-cognitive behaviours’ - these include:

motivation - the enthusiasm to start a task

volition - the effort needed to see a task through

self-efficacy - the belief that you can do the task

conscientiousness - attention to detail

perseverance - keeping working despite setbacks

Action Step

Make these ‘non-cognitive behaviours’ part of your classroom vocabulary and stress to ALL pupils that they can improve them.

