

LOOK CLOSER

Weekly In-Depth Reading Comprehension

What do you think of Look Closer? Tell us how we could improve this resource for you at schools@firstnews.co.uk

Look Closer for Issue 313

8 - 14 June 2012

Science: Jet car aims to break land speed record

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Resource Explanation

Look Closer encourages pupils to look closer at one article in the week's newspaper and analyse it in detail. Each week the questions will enable children to find the facts, interpret the information and work out why journalists wrote and presented the story the way they did. These questions are based on the assessment focus strands (AF2-7) which are referenced in the Teacher Answers along with suggested levels.

The resource assists Year 5, 6 and 7 pupils in developing essential reading comprehension skills. It is a useful weekly SATs practice activity using topical real news to engage pupils.

Uses

Ideal for:

- guided reading
- booster sessions
- homework activities
- SATs practice
- whole class starters
- cross-curricular functional skills practice
- extension activities
- individual assessment focus (AF2-7) teaching opportunities by focusing on one question in a plenary session
- a handy record of pupils' reading performance and ideal APP evidence

LOOK CLOSER

Weekly In-Depth Reading Comprehension



Can you:

- Find the facts?
- Interpret the information?
- Work out why the journalist wrote and presented the story in the way that they did?

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SCIENCE

For more science news, pictures and videos go to www.firstnews.co.uk/discover

Curvanta and Siemens



Jet car aims to break land speed record

THOUSANDS of schools are following an attempt to smash the land speed record.

An illustration of the Bloodhound SSC attempting to break the land speed record

The super-fast car is being designed by world-leading experts who want to share their knowledge – especially with young students. That's because they want to inspire a new generation of scientists, engineers and designers.

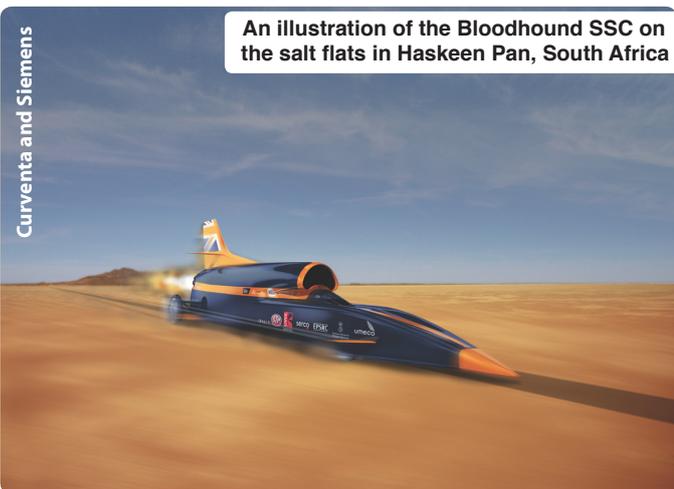
The Bloodhound SSC will be powered by a jet engine that is normally used in the Typhoon Eurofighter. The driver should feel at home, though – he's a former jet fighter pilot.

A separate engine normally found in an F1 racing car will be used to pump huge amounts of fuel into the rocket engine.

The team behind the record attempt hope the car will reach a speed of 1,600km/h (1,000mph) at salt flats in Hakskeen Pan, South Africa. That's almost one and a half times the speed of sound and would smash the current land speed record of 1,228km/h (763 mph), which was set 15 years ago.

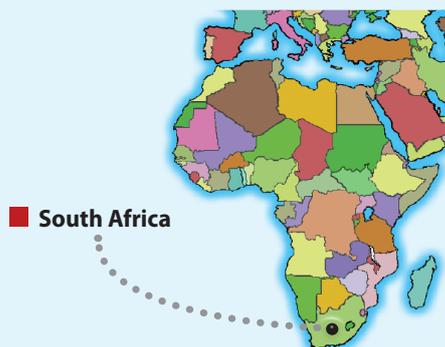
Everything about the car will have to cope with this amazing speed. The wheels, for example, will be solid aluminium. They are being designed by a Scottish company and are built so they won't disintegrate as they turn up to 177 times a second.

The Bloodhound Education Programme is available to all pupils in primary and secondary schools. Nearly 4,000 schools have registered already. You can find out more at www.bloodhoundssc.com.



An illustration of the Bloodhound SSC on the salt flats in Hakskeen Pan, South Africa

WHERE, OH WHERE?



SCIENCE **8 - 14 JUNE 2012**

Can you:

- Find the facts? ● Interpret the information?
- Work out why the journalist wrote and presented the story in the way that they did?

Carefully read the article 'Jet car aims to break land speed record' and then answer the following questions:

1) What is the name of this super-fast machine and what world record is it hoping to break?

The car: 

The record: 

2) What is motivating the world-leading experts to take on this challenge?



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3) What two speed machines do the car's two engines come from?

1.  2. 

4) Why do you think a former jet fighter pilot might make a good driver for this endeavour?



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5) Fill in the numbers:

- The current world speed record is mph, or km/h.
- This record was set years ago.
- The Bloodhound engineers hope their car will reach a speed of miles per hour.
- This is times the speed of sound.
- The car's aluminium wheels will rotate times a second.

SCIENCE

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6) In the lead paragraph, the journalist says that many schools are following this attempt to 'smash' the land speed record. The writer could have written to 'break' or 'better' the land speed record. Why is the word 'smash' a good choice here?



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7) Does the main picture which goes with this article show the actual jet car?



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8) It's not just the words in a newspaper which give information to a reader, pictures can tell you lots about a story, too. Take a good look at this illustration. What do you think the illustrator wants to 'tell' you about this project?



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9) Why is the last paragraph particularly important to this story?



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10) Why do you think this amazing speed project might be inspiring to future scientists, engineers and designers (like you!)?



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EXTENSION ACTIVITIES

A. Sub Headings

Journalists often use sub-headings in long or complicated articles to help people understand what each section is about and break up the text. Can you come up with sub-headings for each paragraph in this article? They need to suggest what the paragraph is about and have to be very short. Have a look at the Special Report on page 19 of First News to see an example of a report with sub-headings.

JET CAR AIMS TO BREAK LAND SPEED RECORD

THOUSANDS of schools are following an attempt to smash the land speed record.

1.
The super-fast car is being designed by world-leading experts who want to share their knowledge – especially with young students. That’s because they want to inspire a new generation of scientists, engineers and designers.

2.
The Bloodhound SSC will be powered by a jet engine that is normally used in the Typhoon Eurofighter. The driver should feel at home, though – he’s a former jet fighter pilot.

3.
A separate engine normally found in an F1 racing car will be used to pump huge amounts of fuel into the rocket engine.

4.
The team behind the record attempt hope the car will reach a speed of 1,600km/h (1,000mph) at salt flats in Hakskeen Pan, South Africa. That’s almost one and a half times the speed of sound and would smash the current land speed record of 1,228km/h (763 mph), which was set 15 years ago.

5.
Everything about the car will have to cope with this amazing speed. The wheels, for example, will be solid aluminium. They are being designed by a Scottish company and are built so they won’t disintegrate as they turn up to 177 times a second.

6.
The Bloodhound Education Programme is available to all pupils in primary and secondary schools. Nearly 4,000 schools have registered already. You can find out more at www.bloodhoundssc.com.

B. Speed

Throughout history humankind has been fascinated with speed. Have a look at www.speedrecordclub.com. Can you find the details of the current:

- Land Speed Record
- Water Speed Record
- Air Speed Record

Can you find out who holds the record & where they are from, where & when it was set, the name of the machine and the speed?

Extra-hard challenge: can you make a graph showing the increasing speed of man over the decades for one of the records above? Put the decades along the x axis, and the speed on the y axis. Mark the highest speed for each decade on your graph, from when records began, to the current record holder.



QUESTION ONLY ACTIVITY SHEET: 8 - 14 JUNE 2012

Can you:

- Find the facts?
- Interpret the information?
- Work out why the journalist wrote and presented the story in the way that they did?

Carefully read the article **'Jet car aims to break land speed record'** and then answer the following questions:

- 1) What is the name of this super-fast machine and what world record is it hoping to break?
 - i) The car:
 - ii) The record:
- 2) What is motivating the world-leading experts to take on this challenge?
- 3) What two speed machines do the car's two engines come from?
- 4) Why do you think a former jet fighter pilot might make a good driver for this endeavour?
- 5) Fill in the numbers:
 - i) The current world speed record is mph, or km/h.
 - ii) This record was set years ago.
 - iii) The Bloodhound engineers hope their car will reach a speed of miles per hour.
 - iv) This is times the speed of sound.
 - v) The car's aluminium wheels will rotate times a second.
- 6) In the lead paragraph, the journalist says that many schools are following this attempt to **'smash'** the land speed record. The writer could have written to **'break'** or **'better'** the land speed record. Why is the word **'smash'** a good choice here?
- 7) Does the main picture which goes with this article show the actual jet car?
- 8) It's not just the words in a newspaper which give information to a reader, pictures can tell you lots about a story, too. Take a good look at this illustration. What do you think the illustrator wants to 'tell' you about this project?
- 9) Why is the last paragraph particularly important to this story?
- 10) Why do you think this amazing speed project might be inspiring to future scientists, engineers and designers (like you!)?



TEACHER ANSWERS AND ASSESSMENT FOCUS GUIDANCE

The teacher answers are intended to provide a guide as to the AF strand of the question and possible responses from pupils working at different levels.

In the level 4/5 answers we try to provide the most complete answer possible in order to provide teaching points when discussing the answers with pupils.

1) What is the name of this super-fast machine and what world record is it hoping to break?

The car:

The record:

AF2 - understand, describe, select, retrieve information, events or ideas from texts and use quotation and reference to the text

Possible answers:

L3 – identifying obvious points

The car: The Bloodhound SSC

The record: the land speed record

2) What is motivating the world-leading experts to take on this challenge?

AF2 - understand, describe, select, retrieve information, events or ideas from texts and use quotation and reference to the text

Possible answers:

L3 – identifying obvious points

• They want to break the record / they want to share their knowledge.

L4 – identifying relevant points

• They want to share their knowledge, particularly with young people.

• They want this project to inspire people to become scientists, engineers and designers.

• (And of course, they also want to break the land speed record and reach 1000 mph!).

3) What two speed machines do the car's two engines come from?

AF2 - understand, describe, select, retrieve information, events or ideas from texts and use quotation and reference to the text

Possible answers:

L3 – identifying obvious points

• A Typhoon Eurofighter and a F1 (Formula 1) racing car.

4) Why do you think a former jet fighter pilot might make a good driver for this endeavour?

AF3 – deduce, infer or interpret information, events or ideas from texts

Possible answers:

L3 – simple inference

• Because he/she is good at driving fast machines.

L4/5 - more complex inference with explanation

• Because a jet fighter pilot is experienced at driving very fast machines, like this jet car, which is so much faster than an ordinary car.

• This car is jet-powered, just like the aeroplane, so it may feel similar to drive and control.

5) Fill in the numbers:

• The current world speed record is [**763**] mph, or [**1228**] km/h.

• This record was set [**15**] years ago.

• The Bloodhound engineers hope their car will reach a speed of [**1000**] miles per hour.

• This is [**one and a half**] times the speed of sound.

• The car's aluminium wheels will rotate [**177**] times a second.

AF2 - understand, describe, select, retrieve information, events or ideas from texts and use quotation and reference to the text

Possible answers:

L3 – identifying obvious points

L4 – identifying relevant points

6) In the lead paragraph, the journalist says that many schools are following this attempt to 'smash' the land speed record.

The writer could have written to 'break' or 'better' the land speed record. Why is the word 'smash' a good choice here?

AF5 – explain and comment on the writer's uses of language, including grammatical and literary features at word and sentence level

Possible answers:

L3 – a few basic features of writer's use of language identified

• This word shows they want to break it a lot.

TEACHER ANSWERS AND ASSESSMENT FOCUS GUIDANCE

L4/5 – detailed explanation making reference to choice of words

- The word 'smash' is a good word to choose because it suggests noise and power and a dramatic moment – exactly what this project is about.
- It shows that they don't just want to break the record by a little bit – by a few miles per hour – but they want to do much, much better: the record is 763 mph and they want to do 1000mph!

7) 7) Does the picture which goes with this article show the actual jet car?

AF2 - understand, describe, select, retrieve information, events or ideas from texts and use quotation and reference to the text

Possible answers:

L3 – identifying obvious points

- No, it is an illustration.

8) It's not just the words in a newspaper which give information to a reader, pictures can tell you lots about a story, too. Take a good look at this illustration. What do you think the illustrator wants to 'tell' you about this project?

AF3 – deduce, infer or interpret information, events or ideas from texts/pictures

Possible answers:

L3 – simple inference

- The illustrator wants to tell you that this is going to be a very fast car.

L4/5 - more complex inference with explanation

- The illustrator has drawn the picture to show that this is a very, very fast car. There are lots of blurred lines shooting out from the car to show how fast it's going, and the ground is blurred suggesting it's going so fast you can't even see it.
- The car is drawn from the back so that you can see how it is powered: you can see the jet engines and the fire, or fumes, shooting out the back. This back view also looks more like the shape of an aeroplane than a car, showing it's a radical new design.
- It also shows the Union Jack flag on the fin, so you know this is a British project.

Extension Activities

A. Sub Headings - Suggestions

1. ("The super-fast car...")

Sub-heading: Inspiring design

2. ("The Bloodhound SSC...")

Sub-heading: The jet engine

3. ("A separate engine...")

Sub-heading: The racing car engine

4. ("The team behind...")

Sub-heading: The record

5. ("Everything about the car...")

Sub-heading: Coping with speed

6. ("The Bloodhound Education Programme...")

Sub-heading: The Bloodhound Education Programme