



Speedy cheetah study

Scientists in the United Kingdom are doing an exciting new study to try and discover how cheetahs are able to run so fast.

Cheetahs are easily the fastest running animals on our planet, capable of reaching speeds of up to 120 kilometres per hour! This is as much as 50% faster than any other animal is able to run. Cheetahs are also special because they can hit their top speed after only a couple of steps.

Scientists at the Royal Veterinary College have created a special track for cheetahs to run on. The track has plates inside it, with sensors to measure the force of the cheetah's legs as it runs. There are also special cameras set up on both sides of the track to record the cheetah's movement as it dashes past. These cameras record 1000 frames per second, compared to about 25 frames for normal cameras. The scientists get the cheetah to run by moving a piece of chicken on a string.

The study has so far shown that the cheetah moves very differently on each side of its body as it runs, while its head stays very still in one position.



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A. Reading Skills

Word Power – Use a dictionary and write down what these words mean:

- | | | | |
|--------------------------|---|-----------------------|---|
| ① speedy | ⇒ | ⑥ plate | ⇒ |
| ② study | ⇒ | ⑦ sensor | ⇒ |
| ③ capable | ⇒ | ⑧ measure | ⇒ |
| ④ (a) couple (of) | ⇒ | ⑨ frame | ⇒ |
| ⑤ track | ⇒ | ⑩ compare (to) | ⇒ |

Reading Questions

1 The main goal of this study is...

- A. the top speed of cheetahs
- B. how cheetahs run so fast
- C. using sensors and cameras
- D. how to make cheetahs run

2 Cheetahs hit their top speed...

- A. after many steps
- B. when they see chicken
- C. very quickly
- D. when they run on a track

3 Where is the Royal Veterinary College?

4 How fast can the next fastest animals (after cheetahs) run?

5 What makes the cameras special and why do you think they are being used?





B. News Extra: The cheetah



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Missing words help

stomachs | believed | branch
purr | member | spots | fast
allow | inability | classified
meaning | grassland

True or False?

- ① Cheetahs are cats. T / F
- ② Cheetahs are exactly like other big cats. T / F
- ③ Cheetahs have white fur on their backs. T / F
- ④ Cheetahs' hearts, lungs and nostrils help them to run fast. T / F
- ⑤ Cheetahs are classified as an endangered species. T / F

Listen and fill in the gaps

Cheetahs are _____ the cat family, like lions, tigers, and leopards. Cheetahs are considered _____ the family, because of their amazing running speed and _____ climb well. They are also different from big cats because _____, but cannot roar!

Cheetahs have tan-coloured fur with dark _____. The fur _____ is white. They have deep chests and very narrow waists, and a long tail.

Cheetahs have large nostrils, which _____ suck in more air, and quite large hearts and lungs. _____ these features are important in explaining why cheetahs can run _____. They also have semi-retractable claws – _____ the claws are always out and showing – and this helps to give them a stronger grip when they run.

The cheetah is mostly found only in Africa and south western Asia. It likes to live _____, where it can chase and catch prey. Cheetahs are currently _____ a vulnerable species – one step below endangered.





C. Talk Time!

Person A

- ⇒ **Hey there – what are you up to?**
- B. Training. Getting ready for the school athletics trials.
- ⇒ **Right, right... So why are you on your hands and knees then?**
- B. New tactic. Sprinting technique.
- ⇒ **You think? On all fours?**
- B. You betcha! I've been studying how cheetahs run. I'm going to break records. Call me "Cheetah"!
- ⇒ **I think you've been out in the sun for too long.**

Person B

- A. Hey there – what are you up to?
- ⇒ **Training. Getting ready for the school athletics trials.**
- A. Right, right... So why are you on your hands and knees then?
- ⇒ **New tactic. Sprinting technique.**
- A. You think? On all fours?
- ⇒ **You betcha! I've been studying how cheetahs run. I'm going to break records. Call me "Cheetah"!**
- A. I think you've been out in the sun for too long.

Ask the class!

- ❶ **Where could we be?**
⇒ *In a park, on a training track, etc.*
- ❷ **What position is my friend in?**
⇒ *On hands and knees, on all fours.*
- ❸ **What has he/she been studying?**
⇒ *How Cheetahs run.*
- ❹ **What do I think of this idea?**
⇒ *It's crazy/not going to work.*

Ask the class!

- ❶ **What am I doing?**
⇒ *Training for school athletics trials*
- ❷ **Why am I doing this?**
⇒ *To make a new sprint technique.*
- ❸ **How did I say "yes, absolutely!"?**
⇒ *You betcha!*
- ❹ **What do you think of my idea?**
⇒ *?*





D. Class Discussion

Questions	1 Which is your favourite kind of big cat?	2 Why do you like this kind of cat more than others?	3 Which animal would you like to study as a scientist (and why)?
MY Answers			
Friend 1			
Friend 2			
Friend 3			





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Teacher's Notes

For ideas on how to apply various activities with the different lesson stages, please visit:

http://www.englishraven.com/wnk_teachers.html



Link to archive version of news page:

www.englishraven.com/wnk/20090716.html

Answer Keys:

A. Reading Skills

- ① B ② C ③ *In the United Kingdom* ④ *60 km/hr*
 ⑤ *They take many frames per second, and this helps study a fast-running cheetah more carefully.*

B. News Extra: The cheetah

Cheetahs are **a member of** the cat family, like lions, tigers, and leopards. Cheetahs are considered **a special branch of** the family, because of their amazing running speed and **their inability to** climb well. They are also different from big cats because **they can purr**, but cannot roar!

Cheetahs have tan-coloured fur with dark **spots on it**. The fur **on their stomachs** is white. They have deep chests and very narrow waists, and a long tail.

Cheetahs have large nostrils, which **allow them to** suck in more air, and quite large hearts and lungs. **It is believed that** these features are important in explaining why cheetahs can run **as fast as they do**. They also have semi-retractable claws – **meaning that** the claws are always out and showing – and this helps to give them a stronger grip when they run.

The cheetah is mostly found only in Africa and south western Asia. It likes to live **in open grassland**, where it can chase and catch prey. Cheetahs are currently **classified as** a vulnerable species – one step below endangered.

True or False?

- ① T ② F ③ F ④ T ⑤ F

