



## Cheetah Chat

### Cheetah Habitat

1. How do you think the cheetah's adaptations are suited to its hunting style?
  
  
  
  
  
  
  
  
  
  
2. What time of day do you think a cheetah hunts? What makes you think that?
  
  
  
  
  
  
  
  
  
  
3. Usain Bolt is an Olympic sprinter from Jamaica whose top speed clocks in at 27.8mph. A cheetah regularly clocks speeds of 60mph. How much faster is a cheetah than Usain Bolt?



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### Cheetah Habitat

#### 1. How do you think the cheetah's adaptations are suited to its hunting style?

- *Claws that stick out like a dog's give the cheetah traction in high speed turns.*
- *Even the cheetah's tail helps. Other cats have round, fluffy tails - like your house cat - but not the cheetah. Its tail has a flat surface, like the rudder of a boat, and it helps balance its body as the cheetah runs.*
- *The cheetah has a highly specialized, pointed pad in the back of each front leg. So, while going full speed, the cheetah can slam its two front legs down, hard. The pads tear into the ground bringing the cat to a near instantaneous halt. Then, it grabs its dinner before the antelope can get away.*
- *Cheetah's great speed comes from their long stride and limber but muscular legs. This differentiates them from the other Cat families such as the lions and tigers. Other competitors include hyenas and wild dogs.*
- *The agility and high speed of a cheetah also allows them to attack alone, unlike the hyenas, lions and dogs who attack in packs.*
- *Their prey also differs in that they mostly are more slender and quicker animals. The gazelle, springbok, impala and antelope are common prey for the cheetah. This means that they are also easier to chew and so only need smaller teeth.*
- *Cheetahs have bigger nasal cavities that allow it to inhale larger volumes of air greater air needed as they sprint for their prey.*
- *Another adaptation is their color. Their variegated dark spots on a light background help camouflage them to some degree.*
- *Black lines down their face are called "tear marks" and they are also to prevent glare from the hot overhead sun.*

#### 2. What time of day do you think a cheetah hunts? What makes you think that?



*A cheetah's night vision is poor compared to others in the big cat kingdom; it is the only big cat that hunts during the day. This poses some unique challenges for the cheetah, as it does not have the cover of darkness to enable it to spring a surprise attack on its prey. A cheetah spends the mornings and early evenings looking for prey, when there is light but low sun. To hunt under the heat of a high sun would be extremely challenging for the cheetah, given the energy it needs to expend to catch its meal. The cheetah's spots provide camouflage.*

3. Usain Bolt is an Olympic sprinter from Jamaica whose top speed clocks in at 27.8mph. The cheetah regularly clocks speeds of 60mph. How much faster is the cheetah than Usain Bolt?

*The cheetah is more than 2x faster than Usain Bolt.*

## Going Further

Consider the mechanics that allow a cheetah to be as speedy as it is. Note the stability of the head and the pendulum-like movements of its legs. This is an example of biophysics in action!

Reference: <https://youtu.be/icFMTB0Pi0g>

