

**Cheetah Feeding and Resting Places**

Temperature Investigation with Vernier

Cheetahs are diurnal (active during the day) animals that hunt mostly in the early morning and late afternoon, which are the cooler times of the day.  Because lions and hyenas are also less active during the day, cheetahs avoid competition with these predators.

Cheetahs are the fastest land animal on earth. They can reach speeds of 110 km/h, but they can only maintain that speed for short distances. While pursuing its prey, the cheetah is normally panting heavily from the intense chase and its body temperature can reach 40°C (105°F). After catching the prey, a cheetah must drag its kill to a shaded place that also provides some cover. There it can rest, catch its breath, and avoid overheating before eating.  If the cheetah does not rest, its body temperature may increase to dangerous levels.

**Procedure:**

During this investigation you will look for possible places where a cheetah might take its prey after killing it.

* + - 1. Walk around the area and find three sites where you can take temperature measurements. Make sure your sites have different characteristics.
      2. Use LabQuest and the temperature probes to collect data.
      3. Complete the table on the following page to record data for each of the three areas. Include:
* Location (example, CCF near museum)
* Time of day
* Temperature at the site
* A description of the amount of cover (trees, bush, tall grass) present
* Observations for each site (describe the area)
  + - 1. Select a second probe and record additional data using that probe. Probes available include a Light Sensor, Soil Moisture Sensor, or Relative Humidity Sensor.

**Site #1:**

Location: Time of Day: Temperature: \_\_\_\_\_\_\_\_\_\_\_Additional Data:

Description/Observations:

Amount of cover:

**Site #2:**

Location: Time of Day: Temperature: \_\_\_\_\_\_\_\_\_\_\_Additional Data:

Description/Observations:

Amount of cover:

**Site #3:**

Location: Time of Day: Temperature: \_\_\_\_\_\_\_\_\_\_\_Additional Data:

Description/Observations:

Amount of cover:

**Conclusions:**

1. Select the site you think is the most suitable for a cheetah when it needs to rest after the chase or during the hotter hours of the day when it is not hunting and feeding but needs a place to rest. Explain what features make this a good site for the cheetah.