## **Research tasks**

Your team will have two days to research information about your animal. As a zookeeper, you will need to have expert knowledge about your animal in order to contain it and maintain its health.

- 1. While you are researching, begin developing an inquiry question to investigate.
- 2. At the end of each day of research, summarize what you found. Be sure to keep track of sources used, as you will need to cite your sources in your presentation.
- 3. During your research, figure out what you need to provide a safe, comfortable habitat for your animal in the classroom. You'll need to find answers to the following:
  - a. What is the basic anatomy of your animal? What organelles does your animal have and what are the functions?
  - b. What special characteristics does your animal have that distinguish it from other animals? What can your animal do?
  - c. Where does your animal live? What is its habitat (moisture, temperature, space requirements, type of material the animal lives in)?
    - How can you mimic this habitat in the classroom?
  - d. What is your animal attracted to for food? How does your animal obtain food?
    - How will you provide food for your animal in the classroom?
  - e. What types of environmental conditions are necessary for your animal to survive? Make sure your research is complete and thorough.
    - For example, one need of earthworms is a moist environment because they breathe through their skin.
    - How will you maintain the proper conditions for your animal?
  - f. What time of day is your animal most active? What effect will this have on your experiment?
  - g. What type of container is needed to house the animal?
  - h. Be sure to include information highlighting what you will need to keep the animal alive away from its natural habitat for one week.
    - What kinds of experiments have been conducted on your animal already?
    - What can you learn from the experimental procedures about the care of the animal?
    - What did the researchers learn and what would be the next question you could investigate?
- 4. By the end of day 4 you should have developed three inquiry questions to investigate about your animal. Here are some examples:
  - a. Do snails consume more leaf matter at night or during the day?
  - b. Which type of matter do earthworms pull underground the quickest, leaves or grass clippings?
  - c. Is the heart rate of a snail affected by the amount of light it is exposed to?
  - d. Crayfish that are exposed to a sudden flash of light will hide; will the crayfish continue to hide if it is exposed to many sequential flashes of light?
  - e. Do planarians navigate a maze with three turns just as fast as a maze with four turns?