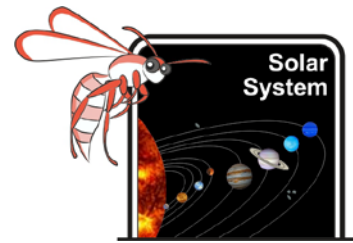


Sky Scavenger Hunt – Teacher Notes



Before publishing their findings, scientists ask fellow experts to read their work; this is called *peer review*. Scientists do this to make sure their findings make sense and are supported by their data. You might have done something similar when you ask a friend or family member to read over an essay to check for mistakes.



Unfortunately, not everything that appears on the Internet has undergone this process of peer review. It is therefore a good idea to consider the trustworthiness of where you source your information and name it when you present your information. Your school library should have an information sheet on how to tell people where you got your information from; this is called *citing your source*.

Peer review can save you from making embarrassing mistakes! Once, a researcher was asked to provide information on how much water was lost from a dripping tap in one day. The researcher dripped water from taps into buckets for several days to get some good data, and then presented the results. However, no one checked the results, and the units for the volume of water collected from a dripping tap were given as litres, not millilitres. It was only after brochures had been printed and an advertising campaign was about to be launched that the mistake was found. The costs in cash and career damage were large.

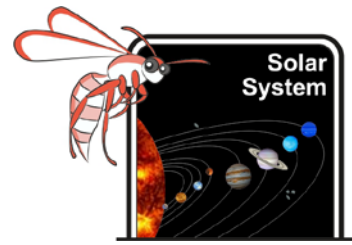
Task 1: Ready, set, research!

Materials

- Access to Internet and reference books
- Scissors and glue
- Questions worksheet
- Group peer reviewed findings worksheet

Method

1. In groups of three, cut the question table into strips, shuffle the strips, and give each group member three random questions to answer.
2. When told to start, each student uses the resources provided to answer just their three questions. Each person also needs to name the source of their information. You have just 10 minutes, so work fast!
3. After all group members have answered all of their three questions, trade your question strips so each person has a set of answered questions. Without talking to each other, check your group mates' answers using the internet and reference books. Try to find a second trustworthy source of information to confirm your group mates' answers.
4. If there are any answers that are questionable, discuss with each other why and how you could find more trustworthy answers.
5. When you are confident you have good answers, use the information your group has gathered to fill in the group answer sheet.
6. All group members sign off on their research.



Sky Scavenger Hunt – Teacher Notes

All questions relate to our own solar system.

Questions (Three each)	Answers	Source
Which is the smallest planet and what is its diameter?	Mercury 4,879km	
Which is the largest planet and what is its diameter?	Jupiter 140,000	
Which planet would be able to float in a truly enormous bath of water?	Saturn	
Which planets have rings?	Jupiter, Saturn, Uranus & Neptune	
Which planets have moons?	Earth, Mars, Jupiter, Saturn, Uranus & Neptune	
Between which planets does the Asteroid Belt lie?	Mars & Jupiter	
Which is the hottest planet and how hot is it?	Venus 480°C	
Which is the coldest planet and how cold is it?	Neptune -210°C	
Which two planets show evidence of running water?	Earth and Mars	