**ET AND EXOPLANET INVESTIGATION**

**Step 1.**

You will be assigned a group consisting of four members and allocated a “specialist” role.

**Step 2.**

Use the Internet links provided below to answer the following questions related to your area of expertise. Each "specialist" will be required to develop a two-page written summary of his or her research, accompanied by a minimum of three illustrations related to the written content.

Specialist roles:

Astronomer:

1. Have scientists discovered other solar systems besides our own? If so, what are the planets in these solar systems like compared to the planets of our solar system?

2. Do scientists believe in the existence of extraterrestrial life? Why?

3. Where do scientists believe extraterrestrial life may exist? Why?

4. How do scientists views of extraterrestrials vary from those of UFO believers?

Links:

An extrasolar planets guide. <http://www.extrasolar.net/evmain.asp>

Extrasolar planets and alien Earths. <http://www.alienearths.org/>

NASA PlanetQuest - Exoplanet Exploration. <http://planetquest.jpl.nasa.gov/>

The Extrasolar Planets Encyclopaedia. <http://exoplanet.eu/>

Is there life in our Solar System? <http://www.bbc.co.uk/science/space/life/looking/>

Origins of the Universe - National Geographic article. <http://science.nationalgeographic.com/science/space/universe/origins-universe-article.html>

Are aliens real? Facts, theories and conspiracies. <http://real-aliens.awardspace.com/>

Theories- scientific vs. esoteric. <http://aliens.monstrous.com/alien_theories.htm>

Article - NASAs search for Earth-size planets in our galaxy. <http://www.cnn.com/2009/TECH/space/03/06/nasa.kepler.mission/index.html?eref=rss_latest>

Historian:

1. What are some of the different ideas that previous generations have had about extraterrestrial life?

2. What do people living today believe about the existence of life beyond earth?

3. Are there any races in Earth’s history who thought that there were planets other than Earth in the solar system or around other stars?

3. Has our theories regarding the existence of extraterrestrials changed? If so, what has produced this change?

Links:

Accounts of aliens visitations throughout history. <http://userpages.bright.net/~phobia/main.htm>

Ancient astronauts. <http://www.ufoevidence.org/topics/General-AncientAstronauts.htm>

Government cover-ups. <http://www.ufoevidence.org/topics/Government.htm>

Online science articles – mysteries. <http://www.firstscience.com/home/articles/mysteries.html>

Past and present theories. <http://www.illuminati-news.com/ufos-and-aliens/html/index.html>

Photographs taken of alleged aliens. <http://www.ufoevidence.org/Cases/CaseView.asp?section=AlienPhoto>

Photos taken of alleged UFO occupants. <http://www.hyper.net/ufo/occupants.html>

The History Channel - UFO hunters. <http://www.history.com/minisites/ufohunters>

The history of UFO beliefs in American society. <http://www.geocities.com/alisiasastrobiomail/History.htm>

UFO accounts <http://www.cohenufo.org/Maccabee/maccabio.htm>

Astrobiologist:

1. What are some of the theories explaining the origin of life on earth?

2. What are some of the chemical characteristics common to all organisms on Earth

3. What physical conditions to organisms on Earth require in order to survive?

4. What do you think alien life will physically look like? Will there be similarities to life on Earth?

Links:

Mars: Extreme planet. <http://mars.jpl.nasa.gov/extreme/>

[Are we alone? - Interview with palaeontologist Peter Ward.](http://science.howstuffworks.com/alien-physiology.htm)<http://www.pbs.org/wgbh/nova/origins/ward.html>

Life beyond Earth - the habitable zone. <http://www.pbs.org/lifebeyondearth/alone/habitable.html>

Articles - Life in the Universe. [http://www.ufoevidence.org/topics/Lifeintheuniverse.htm](http://www.ufoevidence.org/topics/Government.htm)

Does Mars have life? - Interview with NASA scientist Chris McKay. <http://www.pbs.org/wgbh/nova/origins/mckay.html>

Life beyond Earth- National Geographic article. <http://science.nationalgeographic.com/science/space/solar-system/life-beyond-earth.html>

NASA - astrobiology - latest News. <http://astrobiology.arc.nasa.gov/news/>

NASA astrobiology news stories. <http://nai.arc.nasa.gov/news_stories/news_archive.cfm>

NASA PlanetQuest - Extreme organisms on Earth and implications for life beyond. <http://planetquest.jpl.nasa.gov/AlienSafari/AlienSafari.html>

The search for life beyond Earth begins on Earth. <http://www.alienearths.org/online/searchforlife/index.php>

Journalist:

 1. How did authors portray aliens in the nineteenth and twentieth century?

2. How are they depicted in modern-day movies/television? Are they believable?

3. Why do you think stories, TV shows and movies about aliens popular?

4. How are other planets often portrayed in the media?

4. Have artistic interpretation of aliens positively or negatively influenced opinions about alien life?

Links:

Gallery - aliens in film. <http://www.pbs.org/wgbh/nova/origins/et.html>

Aliens in popular culture. <http://www.paranormal-encyclopedia.com/a/alien/popular-culture/>

Art gallery for UFO/aliens. <http://www.alienalley.com/>

Extraterrestrial life in popular culture. <http://www.absoluteastronomy.com/topics/Extraterrestrial_life_in_popular_culture>

Extraterrestrials in fiction. <http://en.wikipedia.org/wiki/Extraterrestrial_life_in_popular_culture>

Pop culture Mars – in film. <http://mars.jpl.nasa.gov/mystique/filmradio.html>

Pop culture Mars – in literature. <http://mars.jpl.nasa.gov/mystique/literature.html>

UFOs and the media.  [http://www.ufoevidence.org/topics/Media.htm](http://www.ufoevidence.org/topics/Government.htm)

**Step 4:**

Once the individual research phase has concluded, all members of the team will gather to organize and prepare for your conference presentation. The presentation will comprise of an overview of the results of your team's research, the conclusion you have drawn regarding the possibility of extra terrestrial life as well as evidence to support this opinion.