

**Phase Three : Arrival**  
**Lessons 21—30**

**Activities 21**

Look at each of the three scenarios presented and respond to each by telling what you would do in the event each happened.

What if you aborted? Where would you go from there? What if it looked like weather conditions would never clear up enough to land safely?

What if you landed safely? How would you proceed from there?

What if you crashed? What does it mean to you to crash on an alien planet? How would you cope? What would be your first order of business?

**Web Resources for this Topic:**

*Several Websites on Space Shuttle Emergency Procedures*

<http://www.spaceflight.nasa.gov/shuttle/reference/shutref/escape/>

<http://www.spaceflight.nasa.gov/shuttle/reference/shutref/sts/aborts/>

*A Short Piece on Landing the Shuttle*

<http://socialstudiesforkids.com/columbia2003/howdoesaspaceshuttleland.htm>

**Activities 22**

Research other important events in exploration and make a timeline including those you find and those in this lesson. Include why each is important, and some thoughts on their contribution to humanity.

**Web Resources for this Topic:**

*A Library of People Who Have Achieved Something*

<http://www.achievement.org>

(Hint: Check out the Hall of Science and Exploration)

*Yahoo! Directory of Explorers*

[http://dir.yahoo.com/Arts/Humanities/History/By\\_Subject/Exploration/Explorers/](http://dir.yahoo.com/Arts/Humanities/History/By_Subject/Exploration/Explorers/)

### **Activities 23**

Imagine that the crew decides to stay and camp. Draw a map of the campsite, what would be the first order of business? How would they establish this safe zone? What kind of problems could arise if they decided to camp?

Now imagine the crew decides to take the rover and explore. Draw the rover as you imagine it. What kind of problems could befall the rover and its occupants?

#### **Web Resources for this Topic:**

*Wilderness Survival*

<http://www.wilderness-survival.net/>

### **Activities 24**

Research how humans on Earth have historically made homes for themselves in all sorts of environments. Specifically concentrate on homes built from the natural resources around the area.

#### **Web Resources for this Topic:**

*Wilderness Survival*

<http://www.wilderness-survival.net/>

*Examples of Non-Permanent Wilderness Shelters*

<http://wmuma.com/tracker/skills/shelter/>

### **Activities 25**

Think back to a time when you have had to deal with something you couldn't simply get rid of. Compare your own experience to that of the *Alpha One* landing party

#### **Web Resources for this Topic:**

*Frequently Asked Questions About Allergies*

<http://allergies.about.com/library/blfaq.htm>

*Sulfur*

<http://pearl1.lanl.gov/periodic/elements/16.html>

*The Respiration System*

<http://sln.fi.edu/biosci/systems/respiration.html>

## **Activities 26**

Given that there is animal life on Alpha Prime, how do you think it will have adapted to the extreme conditions found on Alpha Prime?

Draw some Alphan animals taking into account the adaptations you predicted above. Remember that not all animals will have all of these adaptations.

### **Web Resources for this Topic:**

#### *Extremophiles*

<http://www.micro.unsw.edu.au/rick/extremophiles.html>

#### *Life at the Bottom of the Sea*

<http://www.pbs.org/wgbh/nova/abyss/life/extremes.html>

## **Activities 27**

For each team consider the challenges Alpha Prime's unique conditions will present.

Draw the equipment for each team.

### **Web Resources for this Topic:**

#### *The Four Spheres of Earth*

<http://geography.about.com/library/misc/blsphere.htm>

#### *How the Four Spheres Connect*

<http://www.cotf.edu/ete/ESS/ESSmain.html>

## **Activities 28**

Using the crew members you created earlier, and other characters you create now, assemble some examples of Alphan family trees.

Draw an Alphan family portrait

Draw an Alphan home, taking into consideration some kinds of culture changes which may have occurred since their time on Alpha Prime, and other special things one may find laying around a home.

### **Activities 28** (continued)

#### **Web Resources for this Topic:**

*The Genealogy Home Page*  
<http://www.genhomepage.com/>

### **Activities 29**

For each of the mysteries come up with your own solution. Be creative and original. What do you think the deal is with each off these quandaries?

Draw each of these things

#### **Web Resources for this Topic:**

*A Site of Theories about the Unexplained*  
<http://home.att.net/~numericana/answer/mystery.htm>

*Anomaly Info*  
<http://www.anomalyinfo.com/>

### **Activities 30**

Write up a final report on Alpha Prime. Include challenges encountered, environmental data, mysteries, crew status, etc...

Use your own analysis and creative developments in this report, it should not simply re-iterate the lessons, but instead reflect the universe of Alpha Prime through your own unique viewpoint.

#### **Web Resources for this Topic:**

Alpha Centauri  
[http://www.eso.org/outreach/eduoff/catchstar/cas-projects/nether\\_alphacen\\_1/home.html](http://www.eso.org/outreach/eduoff/catchstar/cas-projects/nether_alphacen_1/home.html)

Constellations and Their Stars  
<http://www.astro.wisc.edu/~dolan/constellations/>  
(Hint: Look under the constellation Centaurus, or Rigil Kentaurus)

Alpha Centauri  
<http://homepage.sunrise.ch/homepage/schatzer/Alpha-Centauri.html>

**Activities 30** (continued)

**Web Resources for this Topic** (continued)

*A Basic Introduction to the Weather and Meteorology*  
<http://www.learner.org/exhibits/weather/>

*The Scripps Oceanographic Institute*  
<http://sio.ucsd.edu/>

*Geology*  
<http://geology.com/>

*The World's Biomes*  
<http://www.ucmp.berkeley.edu/glossary/gloss5/biome/>

*Learning About Rainforests*  
<http://www.srl.caltech.edu/personnel/krubal/rainforest/Edit560s6/www/where.html>

*Missouri Botanical Garden Website About Biomes and Ecosystems*  
<http://mbgnet.mobot.org/>

*Wilderness Survival*  
<http://www.wilderness-survival.net/>

*Examples of Non-Permanent Wilderness Shelters*  
<http://wmuma.com/tracker/skills/shelter/>

*Frequently Asked Questions About Allergies*  
<http://allergies.about.com/library/blfaq.htm>

*Sulfur*  
<http://pearl1.lanl.gov/periodic/elements/16.html>

*The Respiration System*  
<http://sln.fi.edu/biosci/systems/respiration.html>

*Extremophiles*  
<http://www.micro.unsw.edu.au/rick/extremophiles.html>

*Life at the Bottom of the Sea*  
<http://www.pbs.org/wgbh/nova/abyss/life/extremes.html>

*The Four Spheres of Earth*  
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