



PlanetQuest Activity Bag Inserts

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MEDIA & RESOURCES

GETTING STARTED WITH THE NIGHT SKY NETWORK AND THE OUTREACH TOOLKIT

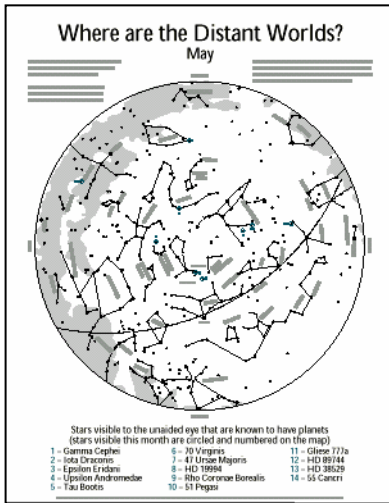
1. **INSERT “OUTREACH TOOLKIT MANUAL AND RESOURCES” CD INTO YOUR COMPUTER.** Click on [PlanetQuestManual.pdf](#) to navigate through the Outreach ToolKit Manual. Review the section on “Your Club’s Membership in the Night Sky Network”. You need the free Adobe Acrobat Reader to view the manual: <http://www.adobe.com/products/acrobat/readstep2.html>
2. **VIEW THE TRAINING VIDEO.**
3. **INTRODUCE THE NIGHT SKY NETWORK and TOOLKIT TO YOUR CLUB** and find members who want to participate.
4. **REGISTER YOUR CLUB’S PARTICIPANTS** in the Night Sky Network.
5. **PLAN EVENTS.** You might get started by bringing copies of the “Where are the Distant Worlds?” Star Maps or the “Telescope Treasure Hunt” Lists to your next public astronomy night.
6. **AFTER EACH EVENT,** log the event into the Night Sky Network. A Club Coordinator will need to approve logged events.
7. See Outreach ToolKit Manual for more details.

WHERE COULD I USE THE ANIMATIONS AND OTHER RESOURCES INCLUDED HERE?

MEDIA / RESOURCE	Pre-Star Party - Indoors	Girl Scouts / Youth Group Meeting	Classroom			Club Meeting	Gen Public Presentation (Seated)
			K-4	5-8	9-12		
<i>Animation:</i> Overview: The Search Begins... (Summary of the NASA missions)	√	√		√	√	√	√
<i>Animation:</i> Four Ways to Find a Planet	√	√		√	√	√	√
Kepler Science Animation (Transit Method)	√	√		√	√	√	√
SIM DVD – NASA Scientists talk about the SIM mission	√	√		√	√	√	√
The Search for Another Earth (PPT)	√	√		√	√	√	√



Where are the Distant Worlds?



DESCRIPTION:

A new twist to the standard star map! Hand out custom star maps to help your visitors find constellations *and* to identify the stars discovered to have planets.

Use the Planetary PostCards to discuss what the planets around the star might look like.

Questions to stimulate discussion:

- That star is hotter/colder than our Sun. How do you think that might affect its planets?
- Here is where one of the planets orbits that star. What would it be like to live on this planet (or one of its moons)?
- If Earth was orbiting that star, what might be different?
- Do you think we have found all the planets in this system?

See Outreach ToolKit Manual and Training Video for more details and suggestions.

WHERE COULD I USE THIS ACTIVITY?

Star Party	Pre-Star Party - Outdoors	Pre-Star Party - Indoors	Girl Scouts / Youth Group Meeting	Classroom			Club Meeting	Gen Public Presentation (Seated)	Gen Public Presentation (Interactive)
				K-4	5-8	9-12			
√	√ (Introduce Activity)	√ (Introduce Activity)	√ (Introduce Activity)						

WHAT DO I NEED TO DO TO BEFORE I USE THIS ACTIVITY?

What do I need to do to complete the materials?	What do I need to supply to run this activity that is not included in the kit?	Do This Before Your Event
<i>Optional:</i> You may want to prepare a page to photocopy onto the reverse side of the star map that has your club information on it.	Red flashlights	Print out and Photocopy: Current month's star map for your visitors.

Telescope Treasure Hunt: How do Stars and Planets Form?



DESCRIPTION:

How are the different objects you view through the telescopes at a star party related to each other? Your visitors tour the telescopes to hunt for the objects that contribute to stellar and planetary formation, using a set of stickers and a “Treasure List”. Visitors mark each object they view or place one of their stickers next to the object on the Treasure List. You have the opportunity to discuss how the object you are showing in your telescope contributes to building stars like our Sun and planets like the Earth you are standing on. See Outreach ToolKit Manual and Training Video for more details and suggestions.

WHERE COULD I USE THIS ACTIVITY?

Star Party	Pre-Star Party - Outdoors	Pre-Star Party - Indoors	Girl Scouts / Youth Group Meeting	Classroom			Club Meeting	Gen Public Presentation (Seated)	Gen Public Presentation (Interactive)
				K-4	5-8	9-12			
√	√ (Tell Story of Star & Planet Formation)	√ (Tell Story of Star & Planet Formation)	√ (Tell Story of Star & Planet Formation)						

WHAT DO I NEED TO DO TO BEFORE I USE THIS ACTIVITY

What do I need to do to complete the materials?	What do I need to supply to run this activity that is not included in the kit?	Do This Before Your Event
<p>Optional: If you have more amateur astronomers participating than the number of badges in the ToolKit, print out on a color printer “Ask Me About Other Worlds” badges and insert them into badge holders.</p> <p>Optional: Include your club’s information on the reverse side of the Treasure List.</p>	Telescopes	<p>If out of stickers, purchase more.</p> <p>If using stickers, cut stickers into strips, if necessary.</p> <p>For use as a reference, you might want to hand out a Treasure List to each participating astronomer.</p> <p>Print out and Photocopy: Treasure Lists for your visitors to use.</p>





Why Do We Put Telescopes in Space?

DESCRIPTION:

Want an easy way to explain why stars twinkle and views through the telescope are sometimes wavy? Let your visitors experiment with mock telescopes and materials that simulate atmospheric conditions. See Outreach ToolKit Manual and the Training Video for details.

WHERE COULD I USE THIS ACTIVITY?

Star Party	Pre-Star Party - Outdoors	Pre-Star Party - Indoors	Girl Scouts / Youth Group Meeting	Classroom			Club Meeting	Gen Public Presentation (Seated)	Gen Public Presentation (Interactive)
				K-4	5-8	9-12			
√	√	√	√	√	√	√	√		√

WHAT DO I NEED TO DO TO BEFORE I USE THIS ACTIVITY?

What do I need to do to complete the materials?	What do I need to supply to run this activity that is not included in the kit?	Do This Before Your Event
Fold the 4"x4"x2" box. Place "mystery" object inside. Place batteries in snake lights.	<i>Optional:</i> Large Flashlight	If you anticipate presenting to more than 10 people at a time, you may want to acquire more tubes (paper towel tubes), rubber bands, and bubble wrap.



How Do We Find Planets Around Other Stars?

DESCRIPTION: Explain how we've found and will find planets around other stars! Manipulate foam balls (representing stars) to simulate the ways we find planets now and how future NASA missions may find planets: star wobble (astrometry and radial velocity), transits, direct imaging of planets. See Outreach ToolKit Manual and the Training Video for details.

WHERE COULD I USE THIS ACTIVITY?

Planet-Finding Method	Star Party	Pre-Star Party - Outdoors	Pre-Star Party - Indoors	Girl Scouts / Youth Group Meeting	Classroom			Club Meeting	Gen Public Presentation (Seated)	Gen Public Presentation (Interactive)
					K-4	5-8	9-12			
<i>Wobble</i>	√	√	√	√	√	√	√		√	
<i>Details on all methods</i>		√	√	√		√	√		√	

WHAT DO I NEED TO DO TO BEFORE I USE THIS ACTIVITY?

What do I need to do to complete the materials?	What do I need to supply to run this activity that is not included in the kit?	Do This Before Your Event
Insert golf tee with planet into the foam ball. Attach a very small (less than 1 mm) ball of clay to end of toothpick and insert in another foam ball.	Nothing	Nothing else