













# A S T R O N O M Y B I N G O

NAME:

PHONE:

B	I	N	G	O
<p>Observe and photograph the Moon at its gibbous phase. </p>	<p>Visit NASA's exoplanet gallery and list one fact about 4 of the "far out" planets <a href="https://exoplanets.nasa.gov/alien-worlds/strange-new-worlds/">https://exoplanets.nasa.gov/alien-worlds/strange-new-worlds/</a></p>	<p> List the planets in order from shortest day to longest day.</p>	<p>Draw a picture of one of the Mars Rovers. </p>	<p>Read a biography of an astronomer or astronaut </p>
<p><b>August 11/12.</b> Observe the Perseid meteor shower and count shooting stars.</p>	<p>Listen to an astronomy podcast or check out a Library video on space.</p>	<p><b>June 10. July 10. August 8. (Nights with no moon)</b> Observe and describe a deep space object through binoculars or telescope.</p>	<p>Print out a picture of Mars or the Moon, then use online maps to label 5 features.</p>	<p>Create a model of the solar system. </p>
<p>Read a nonfiction book about a space mission. </p>	<p>Make and send a video reporting on an astronomy topic of your choice.</p>	<p>Read a nonfiction Library book about the solar system or the galaxy</p>	<p>Observe and photograph the June 24 Strawberry Moon </p>	<p>Photograph then label 4 constellations with the name of their brightest stars.</p>
<p><b>July 23.</b> Observe and photograph the Buck Moon.</p>	<p><b>August 2-14.</b> Observe and describe Saturn's rings through binoculars or telescope.</p>	<p> Watch two NASA videos</p>	<p>Read a myth that explains an astronomical phenomenon </p>	<p>Research one Messier object and draw a picture of it. <a href="https://www.nasa.gov/content/goddard/hubble-s-messier-catalog">https://www.nasa.gov/content/goddard/hubble-s-messier-catalog</a></p>
<p> Read a book about Earth geology.</p>	<p>Research sunrise and sunset times in Connecticut for the first day of each season.</p>	<p>Observe and photograph the Moon at its crescent phase. </p>	<p>Visit and photograph the beach at high tide and low tide. Learn about tides.</p>	<p>Read an astronomy article in a magazine or emagazine. </p>

## H O W T O P L A Y

Astronomy Bingo runs from June 1 to August 14  
Complete 5-in-a-Row to get Bingo! Bingo should take about 5 hours to complete—don't rush!  
See the back of this form for details on different challenges and how to complete them  
Return cards by August 14 to be entered into a prize drawing

✓ If done	<b>Astronomy Bingo Challenge (5 in a row!)</b>	<b>Directions on how to complete</b>
	1. Observe and photograph the Moon at its gibbous phase.	1. Use online moon charts to determine the date of the next “gibbous” moon. Photograph and email to <a href="mailto:childrens@stratfordlibrary.org">childrens@stratfordlibrary.org</a> with subject line Gibbous Moon. Include your child’s name.
	2. Observe Perseid meteor shower. Count the shooting stars.	On Aug. 11-12, if there are clear skies. Go outside. Look toward the constellation Perseus. Spend 15 minutes counting shooting stars. Write # counted here. _____
	3. Read a nonfiction book about a space mission.	Write the name of the book here.
	4. <b>July 23.</b> Observe and photograph the Buck Moon (needs good weather).	Send photograph to <a href="mailto:childrens@stratfordlibrary.org">childrens@stratfordlibrary.org</a> with subject line Astronomy Bingo Buck Moon. Include your name.
	5. Read a book about Earth’s geology	Write the name of the book here.
	6. Visit NASA’s exoplanet gallery and list one fact about 4 of the “far out” planets <a href="https://exoplanets.nasa.gov/alien-worlds/strange-new-worlds/">https://exoplanets.nasa.gov/alien-worlds/strange-new-worlds/</a>	Write the facts on the extra blank page provided.
	7. Listen to an astronomy podcast or check out a Library video on space.	Write the name here.
	8. Make and send a video reporting on an astronomy topic of your choice.	Email or share the video to <a href="mailto:childrens@stratfordlibrary.org">childrens@stratfordlibrary.org</a> Use subject line Astronomy video. Include your child’s name.
	9. <b>August 2-14.</b> Observe and describe Saturn’s rings using binoculars or a	Describe the features of Saturn that you saw (through a telescope or binoculars) on the extra blank page provided.
	10. Research sunrise and sunset times in Connecticut for the first day of each season.	Write the times on the extra blank page provided.
	11. List the planets in order from shortest day to longest day.	Use the NASA website or an encyclopedia to find the answers. Write your list of planets and day lengths on the extra blank page
	12. <b>June 10. July 10. August 8. (Nights with no moon)</b> Observe and describe a deep space object through binoculars or telescope.	M20, M4, M51, the Virgo Cluster, M27, M20, M4, M13, and M57 are all faint objects you could see with binoculars or telescope this summer. Use Nasa’s website to locate these objects by constellation, then use trial and error to locate them in the night sky! Describe your findings on the extra blank page provided.

✓ If done	<b>Astronomy Bingo Challenge (5 in a row!)</b>	<b>Directions on how to complete</b>
	13. Read a nonfiction Library book about the solar system or the galaxy	Write the title here.
	14. Watch 2 NASA videos	Write their names here.
	15. Observe and photograph the Moon at its crescent phase.	Use online moon charts to determine the date of the next "crescent" moon. Photograph and email to <a href="mailto:childrens@stratfordlibrary.org">childrens@stratfordlibrary.org</a> with subject line Crescent Moon. Include your child's name.
	16. Draw a picture of one of the Mars Rovers.	Attach drawing to completed BINGO card.
	17. Print out a picture of Mars or the Moon, then use online maps to label 5 features.	Attach labeled picture to completed BINGO card.
	18. Observe and photograph the June 24 Strawberry Moon (if clear skies).	Send photograph to <a href="mailto:childrens@stratfordlibrary.org">childrens@stratfordlibrary.org</a> with subject line Astronomy Bingo Strawberry Moon. Include your child's name.
	19. Read a myth that explains an astronomical phenomenon	Summarize the myth on the attached blank paper.
	20. Visit and photograph the beach at high tide and low tide. Learn about tides.	Use the newspaper to establish high and low tide times in CT. Send 2 photographs to <a href="mailto:childrens@stratfordlibrary.org">childrens@stratfordlibrary.org</a> with subject line Astronomy Bingo Tides. Include your child's name. Write the dates and times of the tides on the attached blank paper.
	21. Read a biography of an astronomer or astronaut.	Write the title here.
	22. Create a model of the solar system.	Send photograph of your model to <a href="mailto:childrens@stratfordlibrary.org">childrens@stratfordlibrary.org</a> with subject line Astronomy Bingo Solar System Model. Include your child's name.
	23. Photograph, then label 4 constellations with the name of their brightest stars.	Use Apple Photos app or similar Android app to allow you to draw on a cell phone photo, or print out your photos and write on them. Label each constellation picture with the name of the constellation and the name of its brightest star. Email photographs to us at <a href="mailto:childrens@stratfordlibrary.org">childrens@stratfordlibrary.org</a> with subject line Astronomy Bingo Constellation Pictures. Include your child's name.
	24. Research one Messier object and draw a picture of it. <a href="https://www.nasa.gov/content/goddard/hubble-s-messier-catalog">https://www.nasa.gov/content/goddard/hubble-s-messier-catalog</a>	Attach drawing to completed Bingo Card. Messier objects are deep sky objects and many are outside our galaxy!
	25. Read an astronomy article in a magazine or emagazine.	Write title of article and name and date of magazine issue here.

# FINDINGS

Record any bingo challenges here by their number. Attach extra pages as needed.