

INCLUDED SUPPLIES

- Paper
- Tape
- Straws

ADDITIONAL SUPPLIES

- Sharpened Pencil
- Ruler

DO REFLECT APPLY

Create a paper rocket that can be launched from a drinking straw – then, modify the design to see if you can make the rocket even fly farther!

First, design and make your straw rocket. Cut out a paper rectangle for the rocket body and decorate, if wanted. Wrap the paper rectangle around the pencil lengthwise to make a tube and tape to secure.

Cut out four fins (triangle shapes) for the rocket. Tape the fins onto the bottom of the rocket body.

Twist and pinch the top of the rocket body tube around the sharpened end of a pencil carefully. This will help you make the nose cone of the paper rocket. Place a small piece of tape if needed on the nose cone to seal it up. Why does the nose cone need to be sealed?

Prepare to launch! Remove the pencil and place your rocket over the straw. Be sure your launch area is clear of people and hazards. Then, blow into the straw to launch your rocket outward.

Record the distance the rocket traveled using a yardstick or tape measure on a data sheet. For each launch, write down the distance and the changes you made.

Think about changes you could make such as the length of the nose cone or different fin shapes to make your rocket launch even farther. Then launch again and again! Think about what worked well with your rocket and what you might want to change after each test.

Discuss or write about the following question: How did your design impact your rocket launch? Use your data to help you answer this question.

With permission, share your learning with others and a photo of your rocket on social media. Hashtags: #4hAtHome or #IowaSpaceGrantConsortium Link to full directions from NASA: <https://www.jpl.nasa.gov/edu/learn/project/make-a-straw-rocket/>

Follow-up NASA Videos: <https://www.nasa.gov/artemis-1> <https://www.nasa.gov/exploration/systems/sls/index.html>

Thank you to our partner Iowa Space Grant Consortium!

LEARN MORE

Project areas are topics that 4-H members can learn about on their own, with a friend, at a club meeting, or at 4-H events. To learn more about the project areas you can explore in 4-H, please use our free resources online at <https://store.extension.iastate.edu/product/15266>.

To get involved with 4-H in Cherokee County, please contact Debbie, Cherokee County Youth Coordinator, for more information.

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Straw Rocket

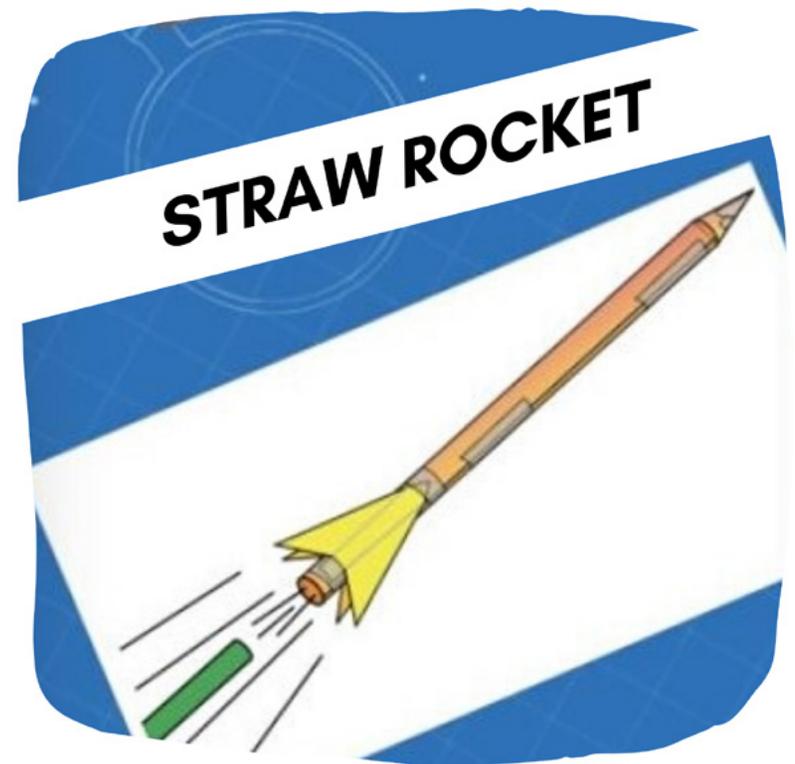
R N S T R A W
U P T C O N E
L A U N C H T
E P B A K D A
R E E S E J P
Z R S A T T E
L P E N C I L

Word List

ROCKET PENCIL STRAW NASA TAPE
LAUNCH PAPER RULER TUBE CONE

4-H at Home

ON THE GO LESSON



INCLUDES

PAPER | TAPE | STRAWS

4-H PROJECT AREAS

STEM | AEROSPACE



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