

Turkey Hideout

STEM



TURKEY HIDEOUT

LOW PREP
THANKSGIVING
STEM CHALLENGE

K-5TH GRADE

CREATED BY BROOKE BROWN

- ✓ SIMPLE SUPPLIES
- ✓ INTERACTIVE ANCHOR CHARTS
- ✓ VISUAL VOCABULARY
- ✓ QR CODE RESEARCH
- ✓ REFLECTION QUESTIONS

Turkey Hideout

The turkey does not want to get eaten on Thanksgiving!

Protect him by constructing a shelter that will keep him completely hidden and safe.



MATERIALS:

- Building materials of your choice: base ten blocks, linking cubes, building bricks, magnetic blocks, or wooden planks
- Large plastic cup with paper turkey taped to the front

Turkey Hideout

REAL WORLD EXAMPLES



What is similar? What is different?
Types of Hideouts or Shelters

What Turkeys Need

EXPLORE

TURKEYS

TURKEY TROUBLE



ALL ABOUT TURKEYS



COOL TURKEY FACTS



TURKEY HOUSE



WORDS TO KNOW



conceal

hide, cover or keep from sight



shelter

a structure or home designed for protection



protect

to keep safe from harm or injury



enclosure

an area that is sealed off with a barrier

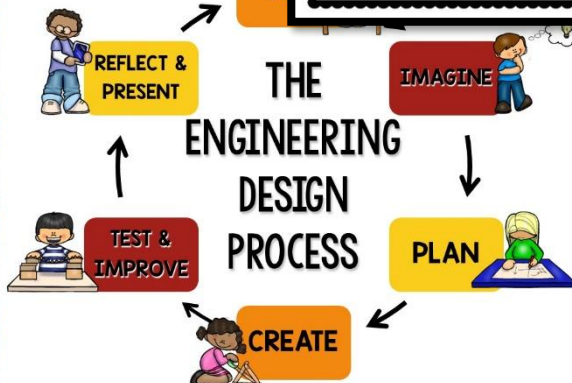


LET'S REFLECT!




- What was most difficult about this challenge?
- What is the purpose of a hideout?
- What types of structures do people build that are similar to hideouts and what features do they need to have?
- What are some types of natural structures that animals build that are similar to hideouts and what features do they have?
- If we completed this challenge again, what would you do differently next time?

THE ENGINEERING DESIGN PROCESS



DIFFERENTIATED RECORDING SHEETS FOR K-5TH GRADE


LOWER GRADES



Turkey Hideout

Name: _____

MY BLUEPRINT



Draw a picture of your hideout.

What materials did you build with?

Does your hideout HIDE your turkey?


YES NO

Does your hideout keep your turkey SAFE?

YES NO

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UPPER GRADES



Turkey Hideout

Name: _____

BLUEPRINT

What materials did you choose to build with and why?

How does your hideout CONCEAL your turkey?

How does your hideout PROTECT your turkey?

What improvements did you make to your hideout design?


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DIGITAL GOOGLE SLIDES NOTEBOOK

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STEM Challenge Assessment Rubric

Challenge: _____

Date: _____

Student Name: _____

3	2	1
Student followed all instructions for challenge.	Student followed some instructions for challenge.	Student did not follow instructions for challenge.
Student used best effort and perseverance on challenge.	Student used some effort and perseverance on challenge.	Student did not show effort or perseverance on challenge.
Student completed assigned blueprint and reflection sheet.	Student partially completed assigned blueprint and reflection sheet.	Student did not complete assigned blueprint and reflection sheet.
Student showed accuracy in testing, calculating, and measuring.	Student showed some accuracy in testing, calculating, and measuring.	Student did not show accuracy in testing, calculating, or measuring.
Student fully cooperated with group members and contributed fairly.	Student partially cooperated with group members and contributed fairly.	Student struggled to cooperate with group members and/or failed to contribute.
Student fully participated in class discussions.	Student somewhat participated in class discussions.	Student did not participate in class discussions.
TOTAL POINTS: _____ /18		
Comments: _____		

We Need STEM Supplies!

Dear Families,

We are learning all about Science, Technology, Engineering, and Math through STEM lessons, and we need your help! If you are able to donate any of the following supplies for our STEM Challenge, please detach and return the form below and send back to school with your child. We greatly appreciate your support and generosity!

We are in need of the following items by _____:

Thank you so much for helping to make our STEM lessons possible!

Please contact me at _____ with any questions.

Sincerely, _____

All you are able to donate, please detach and return the form below:

Parent Name(s): _____

Child's Name: _____

I am able to donate: _____

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SAY Hello TO STRESS-FREE STEM!

SUPPLIES CHECKLIST

STEM CHALLENGE	ITEM	NUMBER PER GROUP	I HAVE IT
Turkey Hideout	Building blocks such as base ten blocks, linking cubes, building bricks, magnetic blocks, or wooden planks	variety of choice tubs per class	
	turkey template taped to the front of a large plastic cup	1	

STANDARDS ALIGNMENT

CHALLENGE	ENGINEERING	SCIENCE	MATH
Turkey Hideout	K-2-ETS1 Engineering Design: K-2-ETS1-4, 3-5-ETS1-2, 3-5-ETS1-3 3-5-ETS1 Engineering Design: 3-5-ETS1-4, 3-5-ETS1-2, 3-5-ETS1-3	•Action/Reaction Forces, tension and compression forces, weight and balance, stability •Animal Behaviors and Habitats	MP1: Make sense of problems and persevere in solving them MP2: Reason abstractly and quantitatively MP3: Model with mathematics MP5: Use appropriate tools strategically MP7: Look for and make use of structure

SUPPLIES CHECKLIST & STANDARDS ALIGNMENT

CHALLENGE OVERVIEW

STEM CHALLENGE: Turkey Hideout

OVERVIEW: Creativity is greatly encouraged with this challenge, and designs will differ depending on which building material(s) your students choose. Ensure that the students try to completely hide the turkey! To make it more challenging, have them try to hide multiple turkeys in one shelter.

KEY SKILLS: Engineering shelters or enclosures, Animal habitats/behaviors

SUGGESTED READ ALOUDS: [Turkey Trouble by Wendi Silvano](#), (video link also included on "Explore Turkeys" page.) ['Twas the Night Before Thanksgiving by Dav Pilkey](#), [Run, Turkey, Run! by Diane Mayr](#)

MATERIALS PER GROUP: building blocks such as base ten blocks, linking cubes, building bricks, magnetic blocks, or wooden planks, turkey template taped to the front of a large plastic cup

KEY SKILLS

MATERIALS

SUGGESTED READ ALOUDS

STEP BY STEP INSTRUCTIONS

LESSON PLAN

1. Activate students' prior knowledge by asking them to share what they already know about turkeys. Ask them to brainstorm different type of "hideouts" or shelters that turkeys might have.
2. Share and discuss the videos on "Explore Turkeys."
3. Hold a class discussion, using the teacher chart and real world examples to guide student thinking. (You can project the chart on an interactive whiteboard or document camera.) Record their ideas on the teacher chart.
4. Introduce the STEM challenge and permitted materials.
5. Introduce and discuss key vocabulary cards related to the challenge.
6. Have students sketch blueprints of their designs on their recording sheets.
7. Distribute materials and allow students 30-45 minutes with partners or small groups to construct their turkey hideouts to try to completely conceal the turkey.
8. Hold a whole class closing discussion and reflection, allowing students to share their hideout designs. Use the "Let's Reflect" poster to guide the discussion.