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CAMPING STEM CHALLENGE

Build a Tent



Challenge:

Design a tent that can stand on its own and protect campers from wind.

Suggested Materials:

- craft sticks
- paper
- straws
- pipe cleaners
- tape
- cardboard

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CAMPING STEM CHALLENGE

Keep It Dry



Challenge:

Create a waterproof cover that keeps a paper camper or pretend supplies dry.

Suggested Materials:

- aluminum foil
- wax paper
- plastic wrap
- paper towels
- tape
- cups

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CAMPING STEM CHALLENGE

Campfire Safety Ring



Challenge:

Build a safe pretend fire ring that keeps the campfire area contained.

Suggested Materials:

- cardboard
- paper
- craft sticks
- cotton balls
- tape
- small rocks

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CAMPING STEM CHALLENGE

Creek Crossing Bridge



Challenge:

Build a bridge that helps campers cross a pretend creek.

Suggested Materials:

- craft sticks
- straws
- paper
- cardboard
- tape
- pennies

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CAMPING STEM CHALLENGE

Flashlight Stand



Challenge:

Design a stand that holds a flashlight or paper flashlight upright.

Suggested Materials:

- cups
- cardboard
- craft sticks
- tape
- rubber bands
- paper clips

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CAMPING STEM CHALLENGE

Animal Safe Food Storage



Challenge:

Create a food storage container that keeps pretend camping food safe.

Suggested Materials:

- paper bags
- cups
- string
- foil
- tape
- craft sticks

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CAMPING STEM CHALLENGE

Canoe Float Challenge



Challenge:

Build a canoe or boat that floats and holds weight.

Suggested Materials:

- aluminum foil
- craft foam
- straws
- cups
- tape
- pennies

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CAMPING STEM CHALLENGE

Sleeping Bag Insulation



Challenge:

Design a sleeping bag that helps keep a camper warm at night.

Suggested Materials:

- felt
- cotton balls
- bubble wrap
- paper towels
- fabric scraps
- tape

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CAMPING STEM CHALLENGE

Campsite Map



Challenge:

Create a campsite map that shows where important camping areas should go.

Suggested Materials:

- paper
- markers
- stickers
- blocks
- craft sticks
- cotton balls

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CAMPING STEM CHALLENGE

S'mores Solar Oven



Challenge:

Build a simple solar oven that uses sunlight to warm a pretend or real s'more.

Suggested Materials:

- cardboard box
- aluminum foil
- plastic wrap
- black paper
- tape
- paper plate

Name: _____

Camping STEM Challenge

Challenge Name:

Make a Plan:

Draw Your Design:

Materials Needed:

Test it: Did it work?

Yes

No

Improve it:

One thing I learned:

Name: _____

Camping STEM Challenge

Ask: What problem are you solving ?

Imagine: What are your ideas?

Plan: Draw & label your design

Create!

Test it!

Improve it!

Explain: What works? What doesn't work? What would you do differently next time?

Name: _____

Camping STEM Challenge

Challenge Name:

Supplies:

Draw Your Design:

Test it: Did it work?

Yes

No

Almost

I can make it better by...

Name: _____

Camping STEM Challenge

Team Members

1. _____
2. _____
3. _____
4. _____
5. _____

Our Challenge:

Our Plan:

Our Design:

Team Jobs:

How will we test it?

Name: _____

Camping STEM Challenge Reflection

The hardest part was...

The best part was...

One thing I changed was...

Next time, I would...

My design worked because...

Name: _____

Camping STEM Challenge Ruberic

Criteria	4 Excellent	3 Good Job	2 Keep Trying	1 Beginning
Planning	We made a clear plan and explained our ideas in detail.	We made a plan and explained most of our ideas.	We made a plan, but it was a little unclear.	We did not make a plan or share our ideas.
Building	We built a strong, creative design and used our materials well.	We built a good design and used our materials well.	Our design works somewhat, and we used some materials well.	Our design does not work well, and we did not use materials well.
Testing	We tested our design carefully and recorded our results.	We tested our design and recorded some results.	We tested our design but did not record all our results.	We did not test our design or record results.
Teamwork	We worked together, listened to each other, and helped everyone.	We worked together and listened most of the time.	We worked together some of the time.	We did not work well together.
Improvement	We improved our design using what we learned from testing.	We made some improvements using what we learned.	We made a small change, but it did not help much.	We did not try to improve our design.