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# Move Up

**STEAM TIME**

DESIGN A WEATHER SHELTER!



Fully aligned with NEM  
MCCEMS program



## DESIGN A WEATHER SHELTER!



**Create an appropriate shelter to protect people from a specific type of weather.**



*What types of weather do you experience where you live? How do you prepare for different types of weather? What types of places are good for each type of weather?*



- ◆ Read the text to learn about how we can prepare and adapt for the effects of different types of weather. Underline all the weather vocabulary you find.

## SHELTERS FOR PROTECTION FROM THE WEATHER



**W**e all experience the effects of weather every day of our lives. Sometimes the weather is pleasant and other times, it causes difficult or dangerous situations for us. Bad or extreme weather can create problems: strong wind or heavy rain can break or destroy buildings and houses. Extreme cold or hot weather can make people feel sick.

So, we can protect ourselves with safe shelters. A shelter is a place to protect people from the elements and weather. It has walls and a roof

and it can be made from a variety of different materials, depending on the purpose. For example, for hot weather, the shelter needs a lot of air and shade. For rainy weather, a strong, fully closed roof with no holes is necessary.

Good shelters help people feel comfortable, safe and protected. Scientists study weather, materials and design options to help people prepare and find the most convenient shelter for each weather situation.



- ◆ Use the information from the text to choose the correct answer to each question.

- Extreme weather can \_\_\_\_\_.
  - build shelters
  - help people
  - cause danger for people
  - make buildings
- A good shelter for rainy weather \_\_\_\_\_.
  - has open space and shade
  - protects people with air
  - doesn't have holes in the roof
  - has different materials and air
- A shelter has \_\_\_\_\_.
  - walls and a roof
  - extreme weather
  - trees
  - elements and weather
- A shelter helps people \_\_\_\_\_.
  - design things
  - use weather
  - study things
  - feel safe
- Scientists study weather because they want to \_\_\_\_\_.
  - make weather
  - help people in different weather situations
  - make materials in different weather situations
  - feel comfortable

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♦ Find 10 adjectives in the text. What noun do they describe?  
Write the adjectives and the corresponding nouns they describe in the list below.

adjective	noun	adjective	noun
1. _____	- _____	6. _____	- _____
2. _____	- _____	7. _____	- _____
3. _____	- _____	8. _____	- _____
4. _____	- _____	9. _____	- _____
5. _____	- _____	10. _____	- _____



♦ Match the weather word to the correct description. Write the corresponding number on the line.

- |          |       |                              |
|----------|-------|------------------------------|
| 1. sunny | _____ | a) a lot of air moves        |
| 2. rainy | _____ | b) high temperature          |
| 3. windy | _____ | c) low temperature           |
| 4. cold  | _____ | d) the sun is out in the sky |
| 5. hot   | _____ | e) water falls from the sky  |



♦ Design a shelter for one specific type of weather. Think of the design, distribution of spaces and materials necessary for the perfect shelter for this type of weather.  
♦ Draw or make a picture of your shelter. Mark the different materials and parts of your shelter. You can use these vocabulary items to help you.

Materials		Adjectives		
steel	wood	light	waterproof	ventilated
iron	metal	open	heavy	dark
glass	bricks	closed	thick	resistent
concrete	bamboo	strong	insulating	porous
sand	plastic	tall	short	flexible



♦ Share or present your shelter to the class or your teacher. Include these points in your presentation:

- Describe the type of weather the shelter is for
- Include a minimum of 3 adjectives to describe the shelter or its materials
- Explain why this weather is a problem
- Describe the materials in your shelter
- Give reasons why these materials are appropriate for this shelter and weather
- Describe the organization of the space in the shelter
- Explain why this shelter is safe for this type of weather

You can use and adapt these phrases to help you:

Our shelter has \_\_\_\_\_ The weather is a problem because \_\_\_\_\_  
Our shelter is safe because \_\_\_\_\_ The walls are \_\_\_\_\_

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♦ Draw your weather shelter here. Label the design with the materials used. Write your full description below.

♦ Materials used:

walls: \_\_\_\_\_

roof: \_\_\_\_\_

other areas: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

♦ Our weather shelter is for \_\_\_\_\_ weather \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_