## Forecasting Through Senses

Summary
Students will gain an understanding of the profound effect weather has on our everyday lives.

## Materials

Weather journal for each student
Pencils
Rubber bands
Crayons
Dry erase markers
Camera
Microphone

- Weather forecasting chart (pdf)
- Reporters recording sheet (pdf)
- Children with clothes blacklines (pdf)

Books:

- What Will the Weather Be?
by Lynda DeWitt, ISBN-13:978-0-06-445113-0
- What's the Weather? With Fun Flaps to Lift and Wheels to Turn
, by Scholastic, ISBN-13-978-0-545-02599-7
- Thunder Cake
, by Patricia Polacco, ISBN: 0-698-11581-3
- It Looked Like Spilt Milk
, by Charles G. Shaw, ISBN: 0-59042875-6
- Cloudy with a Chance of Meatballs
, by Judi Barrett, ISBN: 0-590-30384-8
Media:
- The Weather Network
- Space Weather
- Media Matters
- Climate Change article
- Weather Underground

Articles:

- About.com: Weather
- Weather


## Background for Teachers

It is important for children and adults to gain an understanding of the weather because of the profound effect that it has on our everyday lives.
The students need to have a basic understanding of what the five senses are. The students also need to be able to know how to dress appropriately for the weather.
To forecast the weather, you can observe the weather using all five of your senses: sight, touch, hearing, smell, and taste.
NOTE: Review the senses but do not teach them.
Instructional Procedures

Invitation to Learn:
Launch: (10-20 minutes)
Begin this lesson reading the book What Will the Weather Be? by Lynda DeWitt. As you read, point out the different senses the people are using throughout the book.

How did the people in the story use sight?
Sight is the easiest sense to use when you forecast. If you look out the window and see rain, then it's raining outside. Sight is very important and useful for forecasting.

How did the people in the story use touch?
Touch is another sense that's easy to use when forecasting. You can feel the sun hitting your face, and you can feel your face get colder when a cloud passes between you and the sun. You use touch when you use the wind to forecast the weather.

How did the people in the story use their hearing to forecast the weather?
Hearing is useful for forecasting the weather. When you hear thunder, you know that a storm is nearby, even if you didn't see the lightning. You can hear the wind blow harder or softer through trees or as it whips around year ears.

Did the people use their sense of smell to help them forecast the weather? It sounds funny, but your sense of smell can help you predict the weather too. When you know it's about to rain, smell the air. Rain has a distinct smell to it. A snowstorm has a distinct smell too. When you smell these aromas in the air, you know what kind of weather is likely to happen.
As for taste, you can't use it to forecast the weather. You can't taste the wind or sunshine. You can taste rain or snow by catching it on your tongue as it falls from the sky, but it won't tell you anything about the weather. And never drink rain water off the ground, or eat yellow snow.
Instructional Procedures:
Explore (10 minutes)
After reading the book, assign one of your students to be the reporter and another student to be the cameraman.

The reporter's job is to go outside and predict the weather using his/her senses. Send the recorder out and have the student fill out the recording sheet (see attached blacklines).
The cameraman's job is to record using a play camera or an old camera as he/she reports the daily weather to the rest of the class.
While the reporter is outside have the other students get out their weather journal and predict what they think the weather will be.
Have the reporter come back and forecast to the students what the weather will be today and dress the girl or boy (see attached blacklines) in the kind of clothes they should be wearing when they go outside for recess today.
Discuss (Whole Group Discussion) (5-10 minutes)
Ask the students if their prediction was the same as the reporter's.
As a class, predict what the weather will be for the next day and fill out the chart.
Solidify (Closure) (10 minutes)
Use questioning to solidify learning.
How did you know how to dress the girl/boy for recess?
What senses did you use to help predict the weather?
Additional Lesson Activities:
Thunder Cake Activity:
Read the book Thunder Cake by Patricia Polacco (ISBN: 0-698-11581-3).
After reading the book, talk about thunder. Have a fun discussion about how we know how far away the thunder is by counting between each thunder sound.
Then say, "It thundered last night, while you were sleeping, so I made a thunder cake so when you hear thunder in the future you don't have to be scared.
"It Looked Like Spilt Milk" Activity:

## Materials:

Blue construction paper
White computer paper
Pencil
Read the book, It Looked Like Spilt Milk by Charles G. Shaw (ISBN: 0-590-42875-6).
Have the students draw a picture of anything they want on the white piece of paper, and have them tear it out instead of using scissors.
Glue the white "creation" on the blue paper and then have the student write, "It looked like spilt milk but it was really " $\qquad$ ." This is a great writing connection.
"Cloudy with a Chance of Meatballs" Writing Activity
Read the book, Cloudy with a chance of Meatballs by Judi Barrett, (ISBN: 0-590-30384-8).
Have the student write "Cloudy with a chance of "
" (pdf) and have them write and
illustrate what they would like to see fall from the sky.

## Extensions

For your higher-level thinkers, have them predict what the weather will be all week long and record their predictions in their weather journals. As the days pass, have them see if their predictions were correct and explain why if they weren't. Ask the students questions like, "What made you think it was going to snow today and not tomorrow?" or "Why would you predict that it would be sunny all week?"
For students who have a hard time thinking past today, have them write down what they think the weather will be that afternoon.
If students struggle with writing, have them draw pictures of what they think the weather will be instead of words.
Math integration: Have them record daily what the weather is on a weekly graph and have a discussion of what they found out at the end of the week.
Family Connections:
Assignments to do with parents:
Send home the following two stories on Monday and Thursday (see attached blacklines) Have the children take this home and have their parents help answer the questions!
Monday:
With the weather radio dead, your family has a problem. They have lots of activities planned for this weekend, like hiking and canoeing. How are they going to know if the weather will be nice when they go hiking, or when a storm may appear?
Thursday:
Hope you remember your lesson about senses forecasting, because now you're going to need it!
Your brother wants to go canoeing this afternoon, and wants to know if it's going to rain. He wants you to use your senses forecasting lesson to see if the weather will stay nice this afternoon. And if you don't get it right, he's going to make you use your sense of taste to eat dirt.
So you use your sense forecasting lessons to see what the weather will be. With your sight, you see dark clouds that are covering the sky in the distance. With your sense of touch, you feel a warm wind coming from the south. With your sense of hearing, you hear a dull rumbling off in the distance.
So what do you tell your brother?
Assessment Plan
A great assessment will be students' weather journals -- this is an ongoing assessment to be used every day.
Did they dress the girl/boy appropriately?

Did they fill out the recording sheet correctly?
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