## Lesson 139

## Skills:

- Learn about three forms of matter.
- Observe a change in the form of matter.
- Observe movement energy.
- Read and write a parody.
- Recognize a quarter note, quarter rest, half note, and half rest. Clap a rhythm.

Materials:

- Two resealable plastic baggies
- Baggie of ice from Lesson 138
- Pot
- Mirror
* Balls: basketball, tennis ball, golf ball
- Sight Word Bingo game
* Where the Mild Things Are, by Maurice Send-up
- Where the Wild Things Are, by Maurice Sendak
- Winnie-the-Pooh, by A. A. Milne

Worksheets 139, 139a, 139b

## Calendar:

- Continue routine activities.
* Read Winnie-the-Pooh, chapters 6-7.
- Have your child write about any topic he chooses in his journal.


## Language Arts/Science:

* Have the child fill a resealable plastic baggie with water and seal it. Then have him blow into another resealable plastic baggie and seal it. Have him get the resealable plastic baggie out of the freezer. Ask him to compare the three baggies. How does each feel? Is it hard, soft, squishy? Cold, warm? Light, heavy? Have him cut the baggie holding the ice. Peel the baggie off. What happens? (The ice keeps its shape. It may start to melt.) Have him cut the baggie holding the water (over a sink). What happens? (The water flows out.) Have him cut the baggie holding the air. What happens? (The baggie becomes flat. It feels empty.) Tell the child that matter is anything that takes up space. There are three forms of matter- solid (ice), liquid (water), and gas (air). Have him record his observations on the chart on worksheet 139.
* Tell the child that energy can change the form of matter. Place the ice block in a pot on the stove. Turn on the stove. Ask the child, "What type of energy are we using?" (heat) Have the child observe what happens as the ice gets hotter in the pan. (It melts.) The matter has changed from a solid to a liquid. Now continue to heat the water until it is boiling, and show the child the steam coming out of the pot. If it is difficult to see, hold a mirror above the pot. The steam will collect on the mirror and make it look foggy. The matter is now changing from a liquid to a gas.
* Measure one cup of water. Boil it for five minutes. Pour it into a glass measuring cup and measure it. How much water is there now? (about $2 / 3$ of a cup) Where did it go? (It changed into gas, and we can't see it.)
* Have the child read the words on worksheet 139 part A. Ask him him to use syllables to sound out the words in the other two rows. Randomly point to the words in part A, and have the child read each one.

Continue until the child is comfortable reading all of them. These words will be included in part B of the worksheet.

* Have the child read about forms of matter on worksheet 139, part B.
* Worksheet 139, part C: Have the child draw a line to match the word to its description.
- matter $\qquad$
- solid anything that takes up space
- liquid it can be invisible
- gas it can be cut

Worksheet 139, part D: Have the child write an example of a solid, liquid, and gas.

* Discuss the meaning of a parody: an humorously exaggerated imitation of a writer's style. Have the child read Where the Mild Things Are. Discuss the parody. Read Where the Wild Things Are, and compare the two stories. Which does your child like better?
* Have the child choose one of his favorite story books. Then have him tell a parody of the story. Write the story, and illustrate it.
- Play Sight Word Bingo.
- Each player will use a game board.
- Have the child choose one flashcard and read the sight word.
- Cover the word with a panda marker if it is on your game board.
- The first player to cover five words in a row (may be horizontal, vertical, or diagonal), is the winner.


## Math/Science:

- Do a demonstration of movement energy. (Do this activity outside.)
- Bounce a basketball and a tennis ball side by side. Bounce them from chest height.
- Have the child make a prediction about what will happen when the smaller ball is stacked on top of the larger ball and they are dropped together.
- What did you observe? Was his prediction correct?
- The energy of movement from the larger ball is transferred into the smaller one. Drop the balls together again and watch the basketball. It doesn't have much bounce at all.
- Experiment with different balls and arrangements. Place the larger ball on top of the smaller ball. Use a golf ball instead of a tennis ball. Use two identical balls. What do you observe?
* Have the child complete worksheet 139a independently.

Answers:

1. 58 ¢
2. 44 ¢
3. 23 ¢
4. 81 ¢
5. 33 ¢
6. $7 ¢$
7. 60 C
8. 42 ¢
9. 32 C
10. $70 ¢$
11. 18¢
12. 63¢
13. 56 ¢
14. 85 ¢
15. 55 ¢
16. 8 ice cubes
17. 8:05 am; 5 minutes
18. $12,18,24$
19. $24,28,30$
20. $70,80,85$
21. 50
22. 204
23. 379
24. 256
25. 78
26. 533
27. 229
28. 382
29. 384
30. 481
31. 55
32. 125
33. 263

## Music:

* Use worksheet 139a to review the symbols with the child.

This symbol is a quarter note. It equals one beat.

This symbol is a quarter rest. It equals one resting beat.

This symbol is a half note. It equals two beats.

- Introduce a half rest.

This symbol is a half rest. It equals two resting beats. It looks like a hat.

* Have the child cut apart the boxes on worksheet 139b.
- Notice the time signature is $\frac{4}{4}$.
- Show this rhythm pattern:

- Notice there is one half note, and it equals two beats. There is one half rest, and it equals two resting beats.
- The child will clap-hold, rest, rest.
- Show this rhythm pattern:

- Notice there are three notes: a quarter note, a half note, and a quarter note.
- The half note equals two beats and each of the quarter notes equals one beat. This makes four beats.
- When a half note is clapped, clap on the first beat and hold the hands together for the second beat.
- The child will clap, clap- hold, clap.
* Have the child choose a rhythm pattern box, and clap or rest on each beat.
* Show the other rhythm patterns, and have the child clap or rest on each beat.
- Create rhythm patterns of your own.
* Have the child arrange the boxes in a row and create a "clapping" song. Clap the song.

What do you observe about each baggie?

| baggie with ice | baggie with water | baggie with air |
| :--- | :--- | :--- |
|  |  |  |
|  |  |  |

Part A: Read the words.

| matter | solid | moved | anything | forms | liquid |
| :--- | :--- | :--- | :--- | :--- | :--- |
| gas | space | different | change | place | weight |
| heavy | control | container | invisible | expand | light |

## Part B: Read about matter.

## Matter

Matter is anything that takes up space. Matter can be in one of three different forms: solid, liquid, or gas. A solid has its own size and shape. A solid does not change when it is moved from place to place. A solid is an object that has weight. It can be heavy or light. A solid can be cut. A liquid has its own size and takes the shape of its container. It also has weight. A liquid can be difficult to control because it flows. It cannot be cut. A gas takes the size and shape of its container. A gas fills any space. It flows easily and can expand, or get larger. Most gases are invisible. Gases can't be cut.

## Part C: Draw a line to match the word to its description.

matter
solid
liquid
gas

Part D: Write an example of each one.
it can be cut
it can be invisible
anything that takes up space
takes the shape of its container

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Part A: Add or subtract the amounts of money.
I. $42 \phi$
2. $18 \$$
3. $39 \$$
4. $54 \$$
5. $35 \phi$
$+16 \$$
$+26 \$$
$-16 \$$
$+27 \$$
$-2 \phi$
6. $\begin{array}{r}16 \phi \\ -9 \phi \\ \hline\end{array}$
7. $\begin{array}{r}53 \phi \\ +7 \phi\end{array}$
8. $55 \$$
9. $60 \$$
10. $38 \$$
$-13 \$$
-28\$
$+32 \phi$
II. $47 \$$
12. 26 \$
13. $89 \$$
14. $56 \$$
15. $37 \$$

- $29 \$$
$+37 \$$
$-33 \$$
$+29 \phi$
$+18 \$$

Part B: Read the word problems. Answer the questions.
16. There are 14 ice cubes. 6 melt. How many ice cubes are left?
17. Dad is getting ready to leave for work. It will take him 30 minutes to get to work. If he leaves the house at
7:35 am, what time will he get to work? $\qquad$
He has a meeting planned for 8:00 am. How many minutes late for the meeting will he be? $\qquad$
Part $C$ : Fill in the blanks.
18. 9, $\qquad$ , 15 , $\qquad$ 21, $\qquad$
19. 20,22 , $\qquad$ 26, $\qquad$ ,
20. 65, $\qquad$ 75, $\qquad$ , 90
21. 25, $\qquad$ ,75, 100

## Part D: Subtract.

## 22. 792

23. 574
24. 2885

- 588
$-195$
- 29

25. 1 83
$-105$
26. 826
27. 9 । 9
$-293$
$-69$
0
28. $5 \quad 54$
29. 675
30. $7 \quad 6 \quad 1$

- 172
$-291$
-2 80

3. 402
4. 312
5. 620

- 347
- 187
- 357
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A quarter note equals one beat.

A quarter rest equals one resting beat.

A half note equals two beats.


A half rest equals two resting beats.


