**AUTHOR:** Paul T. Williams, Vanguard Honors Program, Phoenix, AZ

**GRADE LEVEL:** Appropriate for grades 3 - 5.

**OVERVIEW and PURPOSE:**

This lesson is designed to give the students practice in the use of fractions, changing fractions, using equivalent fractions, and paying attention to detail. This lesson works well at fourth grade level, but I find it can have good use with advanced third graders.

**OBJECTIVES:**

The student will be able to:

1. Divide a word into appropriate fractional parts
2. Use equivalent fractions to correctly divide words
3. Pay attention to details in instructions relating to "first, "last", "second", etc.
4. The student will analyze the clues and decode the message.

**RESOURCES/MATERIALS NEEDED:**

A MARS candy bar, classroom globe (on a small stand or cradle), activities paper. Before the activity, the MARS bar should be hidden under the classroom globe. The ANSWER KEY for the activity is:

FOR THE FIRST ONE TO FINISH THIS THERE WAITS A PRIZE IF YOU USE YOUR HEAD PERIOD CLUE MARS IS DIRECTLY BENEATH THE SOUTH POLE PERIOD GO LOOK

**ACTIVITIES:**

(See "Resources/Materials Needed" for necessary preparation and activities page) The student will write the appropriate parts of the words on the line to form a new word. When the message is complete, the first student to decode the message will be rewarded by finding the hidden candy bar (MARS bar).

**TYING IT ALL TOGETHER:**

After the winner has claimed his prize, the assignment should be reviewed. During this exercise, many of the students claim that "no such words exist." This is where it is necessary for them to pay attention to the details of the instructions. Usually the brighter students will be the ones to win; in that case, the teacher could team the students into pairs or small teams--if this is done, it is best to be sure to have a MARS bar available for each winning team member.

FRACTION HUNT

1. The first half of food + the last

 quarter of door.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. The last third of hat + the first

 2/5 of heavy.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. The second 1/3 of office + the last

 1/4 of door + the first 1/3 of street.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. The last half of go + the last

 1/2 of done.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. The last 1/8 of elephant + the

 first 1/5 of order.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. The first 3/4 of fine + the last

 3/4 of dish.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. The last 1/6 of cement + the

 first 3/7 of history.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. The last half of bath + the first

 1/3 of end + the last 2/7 of require.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. The first 2/5 of water + the last

 3/4 of fits.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. The last 1/6 of Glenda.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. The first 1/3 of principal + the

 first half of zero.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. The first 1/7 of instant + the first

 third of fat.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. The first 2/5 of young + the first

 1/10 of understand.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. The first 1/4 ugly + the first 1/5

 of settlement.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15. The first 1/4 of youthful + the last

 half of pour.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

16. The first 1/4 of hesitate + the last

 2/3 of sad.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17. The first 1/3 of permanent + the first

 half of iodine.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

18. The first 2/6 of clover + the last

 2/4 of blue.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

19. The first 1/4 of Mark + the last

 3/5 of stars.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

20. The last 1/4 of Meri + the first

 1/5 of Susan.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

21. The first 3/5 of dirty + the last

 3/7 of perfect + the first 2/5 of Lynda.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

22. The first 3/4 of bent + the last

 2/3 of breath.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

23. The first 1/3 of Thomas + the first

 1/8 of Endicott.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

24. The first 3/5 of sound + the last

 2/9 of Aylsworth.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

25. The first quarter of positive + the

 first two thirds of Lee.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

26. The first 4/9 of periscope + the

 last 2/5 of blood.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

27. The first third of get + the second

 fourth of Jody.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

28. The first half of loud + the last half

 of book.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_