5 Minutes Left: What Do I Do? Puzzles

Directions: These are all classroom-tested puzzle “time fillers” that every teacher needs to have when a planned lesson ends earlier than anticipated or the kids just need a break. Some puzzles don’t work well; these all do. What they have in common is that they are challenging, engaging to students, and effective problem-solving/critical thinking activities. Some involve language skills, some involve math, and some both. All you need is your marker, a whiteboard, and a few minutes. Enjoy!

1) Which letter in this line-up is the odd one out and why? HEINZSOX

2) In some Chinese restaurants you can find a dish called “Mother and Child Reunion.” Speculate as to what two ingredients give this salad its name.

3) Choose one letter from each line in vertical order to spell out a similar word:
   YELLOW
   PURPLE
   BLACK
   GREEN
   GRAY
   RED

4) If Caesar ordered 40 extra-large togas and 50 large togas, how many medium-sized togas did he order?

5) Which digit completes the final number in this ongoing series?
   24, 81, 63, 26, 41, 28, 25, 65, 1 __

6) Find as many words as you can that contain fire but do not refer to a wheel.

7) Spell hard water with only three letters.

8) What fourteen-letter words has six i’s in it
   _i_ _i_ _i_ _i_ _i_ _i_ _i_ _i_ _i_ _i_ _i_ 

9) This is a Christmas greeting. Can you find it?
   a,b,c,d,e,f,g,h,i,j,k,m,n,o,p,q,r,s,t,u,v,w,x,y,z

10) What is the next number in this sequence: 77, 49, 36, 18, __________

11) Unscramble these letters and find the names of three things that you can take with you everywhere. E A G L E R E M Y

12) What is unusual about this sentence? The quick brown fox jumps over the lazy dog.

13) What is unusual about this phrase? never odd or even
14) What three letters of the alphabet sound like a compliment when spoken one after the other?

15) _A_ _B_ _C_ _D_

   _B_   _C_   _D_

   _C_   _D_   _E_

   _D_   _E_   _F_

Fill in the nine blanks with letters so that each of the rows B, C, and D across is a four-letter word and each of the columns B, C, and D down is a four-letter word.

16) Take the letters in the word **astronomers** just once to make three words that would make all astronomers very sad!

17) Use three 8s to equal seven.

18) Use numbers 1, 2, 3, 4, 5, 6, 7, and 8. Divide them into two groups so that they have equal sums.

19) Use four 6s to make 42.

20) Unscramble the five words below so that all five words rhyme:
   OOT, OHSE, WREG, ELBU, RKNAOGO

21) There are four trees hiding in the sentence below! Each one reads from left to right, across one or more words. Can you spot them?

   The cloak and cap pleased my pal Mel mildly

22) There are four more trees hiding in the sentence below! Each one reads from left to right, across one or more words. Can you spot these?

   Since in school I’ve given them lockers, the students will owe me spruced-up hallways.

23) How, where, where, or why could these equations be true?

   9 + 6 = 3
   6 X 6 = 18
   29 + 2 = 1

24) In a large family there are eight sons and each has two sisters. How many children are in this family?

25) What is the first counting number to contain all five vowels (a, e, i, o, and u) when written as a word?
26) How many times a week will an old grandfather clock (that is not running) show the correct time?

27) Ten full crates of apples weigh 240 pounds. An empty crate weighs ten pounds. How much do the apples weigh?

28) When writing numbers from 1 through 100 as words, only two numbers contain the letter L. What are they?

29) Find the 100th term of the logical series which begins as follows. It isn’t really that hard: 81, 73, 52, 42, 42, 34, 22, 18, 10, ....?

30) Write 24 with three equal digits, none of which is 8. There are two solutions.

31) Make as many words as you can, using only the letters in strawberries. You may use the letters that appear more than one time (r, s, e) as many times as they exist in the word.

32) Find more than a dozen words that end with ear.

33) Believe it or not, you can form an English word from these letters!: n e e e e l s s s s s p

34) Find this eight-letter word that contains only one vowel:
   s ____ ____ ____ ____ h

35) Find a word that contains the word man, but not at the beginning or the end of the word.

36) What does this say?: HIJKLMNO

37) What same three letters fit into the following five combinations to form 5 words?
   E ____ P
   ____ CK
   S ____ SH
   LI ____ D
   TE ____ LA

38) What does this say?: 1 at 6:45

39) What does this say?: oinf

40) Find as many four-letter words as you can that end with x.

41) What letters come next: J F M
   O T T
42) Use the letters below in the same order that they are shown. Don’t change or drop any letters. Find more than eight words hidden in the letters.

\text{tape broad}

43) If a fast magical act is a “quick trick,” what is a clever insect?

44) March the eighth! A simple date, so a simple puzzle. Rearrange the letters in MARCH to make a common English word. Rearrange the letters in EIGHTH to make another common English word. What are they?

45) The verbs BRING, BUY, CATCH, FIGHT, SEEK, TEACH, and THINK share a common property that no other common verbs in the English language possess. What is it?

46) \text{8549176320}
I used a pattern to arrange these numbers. What is it?

47) Use eight 8s and a plus and equal sign to make exactly one thousand.

48) Some months have thirty days. Some months have thirty-one days. How many months have twenty-eight days?

49) In each sentence below the name of a country is hidden. What are they?

\text{Every newspaper understands the responsibilities it has toward its readers.}

\text{Interpol and the FBI are working together on a giant fraud case.}

50) If you only had the middle row of your keyboard and these letters that are found there: ASDFGHJKL what is the longest word you could write?

51) Double L, double T, and double S are very common in many words. What very common words have the doubled letters II and UU in them?

52) What are the next two letters in this pattern? A E F H I K L M

53) Baseball scores: Atlanta 3 Pittsburgh 2
San Francisco 4 Seattle 3
Los Angeles 4 Miami 3
Boston 2 Philadelphia ??
How many did Philadelphia score in their game with Boston?

54) A woman calls a man on her cell phone, even though they are both in the same room and only a few steps away from each other. Why did she do this?
55) A famous rock group was founded in South Dakota in 1925. All four members have since died, one of whom was assassinated. However, you can still see them today. Explain.

56) Use six 1’s to make 99.

57) Use four 6’s to make 2.

58) Use six 9’s to make 100

59) Perfume in a bottle costs $45. The perfume costs $40 more than the empty bottle. How much does the bottle cost?

60) Show how one-half of five is four.

61) Put ten horses in nine stalls without using more than one per stall.

I I I I I I I I I I

62) How can one-half of 9 be 4?

63) Add one line to this equation to make it true: 5 + 5 + 5 = 550

64) 8 9 9 : Circle 6 numbers for a total of 31

1 5 8

1 1 1

65) Two boys played four games of checkers. Each boy won three games. How can this be?

66) Divide 40 by one-half and add 10 to your answer. What is it?

67) Write eleven thousand eleven hundred eleven as we write numbers.

68) What three letters can be added to the beginning and the end of “ergro” to form a common word? The three letters at the beginning are in the same order as at the end!

69) A common science word is hiding in the sentence below. It may be all or part of two words, and is in correct order. What is the word?

That new tie clip sets off your ties nicely.

70) July and August are two consecutive months with thirty-one days each. What other two consecutive months have thirty-one days each?

71) Use eight 8’s to equal zero, using only one mathematical operation.

72) Starting with the number “one,” what is the first letter that uses an A when it is spelled out?
73) A man was playing a game, and he got the highest score of all the people playing the game. The man, however, got so angry he vowed never to play the game again. Why?

74) Ten parts of the human body can be spelled with just three letters. Can you name them? (don’t use ass)

75) What does this say? O
   TV

76) What does this say? ee ch sp

77) What does this say? noon good

78) Can you name three sports in which the winning team goes backward?

79) Look carefully at this license plate. Why would it be perfect for someone from Chicago?
   51041771

80) Can you name two things that have to be broken before they are used?

81) What does this say? PETE
    PETE

82) What does this say? DICE
    DICE

83) What does this say? I'M you

84) What does this say? DNUORG

85) What does this say? HIS.TORY

86) Three words that end in ZZ: a bumble bee’s sound, soda pop bubbles, and a type of music. What are the three words?

87) Ex: 26 = L. of the A. (26 = Letters of the Alphabet)
    What is 101 = D.
    What is 60 = S. in a M.
    What is 9 = I. in a B.G.

88) What is 90 = D. in a R.A.
    What is 24 = H. in a D.
    What is 11 = P. on a F.T.
89) A freezing hunter had only one match left when he found a cabin. In the cabin were a kerosene lantern, a wood-burning stove, and a fireplace. Which should he light first?

90) A farmer had four haystacks in one field and nine in another. If he combined them, how many would he have?

91) What cat us fuzzy and looks like a worm?  
What cat is a shooting cat? 
What cat is found in a library?

92) A B C D E F G 
What is the letter under which 500 will appear? 
1 2 3 4 5 6 7 
8 9 10 11 12 13 14 
15 ...... 

93) The pages of a book are numbered 1 through 500. How many page numbers will contain at least one 5?

94) What letter will be the 100th in each progression?  
j j f f j j f f j ....  
x v v x v v v x v v v v ....

95) Jeff is four years younger than Amy. If their combined ages are 40, how old is Jeff?

96) If a fast magical act is a “quick trick,” what is a weak man? a lengthy tune?

97) If a fast magical act is a “quick trick,” what is a smarter author? a monster’s banquet?

98) The name of what musical instrument contains four letters, three of which are vowels?

99) What does this say?:  word YYY

100) Sneakers are worn by tennis players, baseball players wear spikes. Football players wear shoes with cleats. In what sport all all-metal shoes worn?
Answers

1) E does not have half-turn symmetry – in other words, it looks significantly different when turned upside down. The others do not.
2) Egg and chicken
3) ORANGE
4) XL = 40 and L = 50 in Roman numerals, therefore M (medium) = 1000 togas.
5) 2 – they are the powers of 2 (2, 4, 8, 16, 32, 64, 128, 256, 512,...) regrouped as pairs of digits.
6) retire, satire, tired, attire
7) ice
8) indivisibility
9) Noel (no l)
10) 8 because 7 X 7 = 49, 4 X 9 = 36, 3 X 6 = 18, 1 X 8 = ____
11) eye, arm, leg
12) It contains all 26 letters of the alphabet at least once.
13) It is palindromic (reads the same backward as forward)
14) UXL (you excel)
15) ABCD
   BALE
   CRAB
   DENT
16) no more stars
17) 8 – 8/8
18) (8,5,3,2) and (7,6,4,1)
19) 6 and 6/6 (or 7) X 6
20) too, shoe, grew, blue, kangaroo
21) oak, apple, palm, elm
22) olive, hemlock, willow, spruce
23) on a clock, upside down, on a calendar
24) 10
25) one thousand five (1,005)
26) 14 (two times a day)
27) 140 pounds
28) eleven and twelve
29) The series goes 81- (8 x 1) =73, 73- (7 x 3) =52, etc. Since 10 – (1 x 0) = 10, all remaining terms will be 10
30) 22 + 2 or 3 to the third power – 3
31) straw, raw, bare, bear, sir, rise, wear, tear, wart, stir, stair, rare, stare
32) bear, dear, fear, gear, hear, near, rear, saw, shear, teary, tear, wear, year, clear
33) sleeplessness
34) strength
35) romantic, humanism, sportsmanship
36) H2O or “water”
37) QUI

©Mark Aaron
38) “one at a time”
39) “in the middle of”
40) coax, hoax, lynx, onyx, flex, flax, flux, apex, ibex, jinx
41) A (April), M (May) and F (four), F (five)
42) tap, tape, a, ape, pea, pear, ear, area, are, read
43) sly fly
44) charm and height
45) the past tense of each of these verbs rhymes with “taut”
46) when spelled out they are in alphabetical order
47) 888 + 88 + 8 + 8 + 8 = 1000
48) all of them!
49) Peru and Poland
50) flasks
51) skiing and vacuum
52) N and T, these being the next two letters composed solely of straight lines
53) Philadelphia scored 5. It’s the number of vowels in each city’s name that determines the score.
54) She was on a blind date but didn’t know what he looked like – she looked to see who answered his cell phone to identify him.
55) Mount Rushmore
56) 111-11-1
57) 6/6 + 6/6
58) 99 + 99/99
59) $2.50 for the bottle and $42.50 for the perfume
60) Write FIVE on the board and circle the “IV”, which is 4 in Roman numerals.
61) Something like this: I t I e I n I h I o I r I s I e I s I
62) Write IX as the Roman numeral nine and then a horizontal line halfway up to make the Roman numeral IV
63) Add a diagonal line in the first plus sign to make it a 4, thus 545 + 5 = 550
64) Circle 1 + 1 + 11 + 9 + 9, basically two one the 1’s circled together make an 11
65) They did not play against each other.
66) 40 divided by ½ equals 80. Add 10 and you have 90
67) 12,111
68) underground
69) eclipse
70) December and January
71) 8888 – 8888
72) one thousand
73) The game was golf
74) arm, toe, eye, gum, jaw, hip, leg, lip, ear, rib
75) “nothing on TV”
76) “parts of speech”
77) “good afternoon”
78) tug-of-war, backstroke swimming, rowing
79) It reads “ILLINOIS” upside down. (make the 4 more differently when written on board!)
80) an egg and a horse
81) “repeat”
82) “paradise”
83) “I’m bigger than you”
84) “background”
85) “a period in history”
86) buzz, fizz, jazz
87) 101 Dalmations, 60 seconds in a minute, 9 innings in a baseball game
88) 90 degrees in a right angle, 24 hours in a day, 11 players on a football team
89) I would suggest first he light a match!
90) one
91) caterpillar, catapult, catalog
92) C
93) 96 (19 in each 100 plus one for page #500)
94) f (multiple of 4), x (x falls on square numbers; 100 is a square number so x
95) 18
96) frail male, long song
97) brighter writer, beats feast
98) oboe
99) “word to the wise”
100) horse racing!
Directions: Begin at the start. Solve the fraction operations problems. Show all work/explanations on the recording sheet. Follow the path based on your answers until you reach the finish.

\[
\frac{1}{2} \div \frac{1}{2} \quad \frac{4}{5} - \frac{3}{8} \quad \frac{7}{8} + \frac{1}{3} \quad \text{Finish}
\]

\[
\frac{2}{7} \times \frac{4}{5} \quad \frac{4}{5} \div \frac{2}{3} \quad \frac{5}{6} \times \frac{3}{4} \quad \frac{11}{12} + \frac{1}{2}
\]

\[
\frac{8}{5} + \frac{3}{4} \quad \frac{3}{5} \times \frac{5}{8} \quad \frac{1}{3} \div \frac{2}{3} \quad \frac{8}{9} - \frac{5}{6}
\]

\[
\frac{11}{6} - \frac{6}{8} \quad \frac{1}{5} + \frac{2}{3} \quad \frac{2}{3} \times \frac{3}{4} \quad \frac{2}{5} \div \frac{1}{2}
\]
Directions: Begin at the start. Solve the fraction operations problems. Show all work/explanations on the recording sheet. Follow the path based on your answers until you reach the finish.

\[
\frac{4}{5} \div \frac{2}{3} = \frac{6}{5}
\]

\[
\frac{2}{7} \times \frac{4}{5} = \frac{8}{35}
\]

\[
\frac{1}{24} + \frac{1}{2} = 4
\]

\[
\frac{11}{9} + \frac{4}{27} = \frac{5}{3}
\]

\[
\frac{3}{5} \times \frac{5}{8} = \frac{47}{20}
\]

\[
\frac{8}{5} + \frac{3}{4} = \frac{17}{20}
\]

\[
\frac{11}{12} - \frac{6}{8}
\]
Directions: Begin at the start. Solve the inequality for the variable. Show all work/explanations on the recording sheet. Follow the path based on your answers until you reach the finish.

X - 2 > 12
y/6 ≤ 8
3y ≥ 33
Finish

y/9 ≤ 5
7y ≥ 42
x + 5 < 13

y/17 ≤ 2
x - 15 > 30
5y ≥ 25
1) Mackenzie collects bookmarks. She has 20 bookmarks with quotes. The bookmarks with quotes make up 40% of her whole collection. How many bookmarks does she have total?

2) Kelsey made 9 out of 12 free throws that she attempted. What percent of the free throws did she make?

3) At Mary Kate’s preschool party there is a choice of water or milk. Her teacher gave out 15 drinks in all, 20% of which were milk. How many milks did she hand out?

4) 30% of the tickets sold at the school play were student tickets. If the drama club sold 90 student tickets, how many tickets did they sell in total?
6) 13 out of 20 is what percent?  

7) What is 30% of 60?  

8) What is 18% of 300?  

9) 14 is 70% of what number?  

5) There are 20 students in Mr. Drury's tutorial. 70% of the students are wearing a hoodie. How many students are wearing a hoodie?
Percent Practice

1) Mackenzie collects bookmarks. She has 20 bookmarks with quotes. The bookmarks with quotes make up 40% of her whole collection. How many bookmarks does she have total?

She has 50 bookmarks total

2) Kelsey made 9 out of 12 free throws that she attempted. What percent of the free throws did she make?

Kelsey made 75% of the free throws

3) At Mary Kate’s preschool party there is a choice of water or milk. Her teacher gave out 15 drinks in all, 20% of which were milk. How many milks did she hand out?

She handed out 3 milks

4) 30% of the tickets sold at the school play were student tickets. If the drama club sold 90 student tickets, how many tickets did they sell in total?

They sold 300 tickets total
20

9) 14 is 70% of what number?

54

8) What is 18% of 300?

18

7) What is 30% of 60?

65%

6) 13 out of 20 is what percent?

4) Students are wearing a hoodie.

3) Students are wearing a hoodie. How many students are wearing a hoodie?

2) There are 20 students in Mr. Drury's tutorial. 70% of the students are...