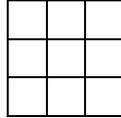
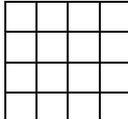


Settlers – Quick problems to get students settled at the start of a lesson



1. How many squares here (of all sizes)? (14)
2. A rectangle is twice as long as it is wide. If its perimeter is 42 cm, what is its area? (98 cm^2)
3. What is the mean of the ten factors of 48? (12.4)
4. Half of a number is 12 more than a quarter of the same number. What is the number? (48)
5. What time is it 150 hours after 10:30 am? (4:30 p.m.)
6. What is the difference between 8% of \$200 and a quarter of \$50? (\$3.50)
7. King Arthur's round table had a diameter of 4 m. What is the largest number of knights that can sit around it if each knight needs at least 80 cm? (15)
8. How many 2 cm cubes will fit into a 6 cm cube box? (27)
9. How many 1 cm by 1 cm stickers will it take to cover a 3 cm cube? (54)
10. 7 children born on the same day have a joint birthday party just for themselves. How many presents will be given? (42)
11. Find the sum of the prime numbers between 30 and 50. (199)
12. If BEE = 12, CAT = 24, DOG = 26, and FISH = 42, what does ALLIGATOR equal? (95)
13. Find the 80th number in this pattern: 9, 13, 17, 21, 25, . . . (325)
14. What is the date 160 days after March 15? (August 22)
15. How many squares here (of all sizes)? (30) 
16. $1=1$, $1+3=4$, $1+3+5=9$, $1+3+5+7=16$ and so on. What is the sum of the first 30 odd numbers?
Hint: Look for a pattern.
17. A man walked 1 kilometre the first day, 3 the next day, 5 the next, 7 the next and so on. How far did he walk in the first 25 days?
18. How many seconds in a day? (86,400)
19. Work out 2^{12} . (4096)
20. Write the difference between $4\frac{3}{5}$ and $2\frac{1}{4}$ as a decimal. (0.65)
21. Find the cost of a \$26 shirt with 8% tax added. (\$28.08)
22. After a 20% discount, a game cost \$88. What was the original price? (\$110)
23. How many 8 cm ribbons can be made from an 18 m length? (225)
24. Find the median of the factors of 72. (8.5)
25. What is the smallest counting number that will divide evenly by both 15 and 24? (120)
26. If you roll a die 220 times, how many fours are you most likely to get? (37)

27. A clown faces north then turns 585 degrees to his right. Which direction will he be facing then? (SW)
28. What is the smallest 4-digit number that divides evenly by 7 and by 3? (1008)
29. If a gallon is 4 quarts, a quart is 2 pints and a pint is 2 cups, write 29 gallons, 2 quarts and 1 cup in pints. (236.5)
30. Find the next two numbers in this pattern: 3, 3, 5, 9, 15, 23, ..., ... (33, 45)
31. How many diagonals can be drawn in a regular octagon? (20)
32. How many ways can you make 60c using only 5c and 10c coins? (7)
33. How many ways can you make \$3.60 using only 5c and 25c coins? (8)
34. What is the lowest number that has a remainder of 1 when divided by 2, 3, 4 and 5? (1)
35. Joe has \$12 more than Vanessa. Between them they have \$56. How much does Joe have? (\$34)
36. $\frac{3}{4}$ of a number is 48. What is the number? (64)
37. The product of two consecutive numbers is 506. What is the larger number? (23)
38. If 3 people can pick 12 tons of grapes between them in a day, how many tons will 5 people be able to pick in 2 days? (40)
39. What is $\frac{1}{2} + \frac{1}{3}$ as a percent to two decimal places? (83.33%)
40. What four consecutive numbers have a total of 62? (14, 15, 16, 17)
41. 12 is $\frac{2}{5}$ of what number? (30)
42. A rectangular tank is 30 cm wide, 50 cm long and holds 75 litres of water. How tall is it? (50 cm)
43. What two square numbers add up to 100? (36 and 64)
44. How much more is a quarter of 471 than a quarter of 451? (5)
45. Pluto is 40 times as far from the sun as Earth. If sunlight takes 8 minutes to get to Earth, how many hours and minutes does it take to get to Pluto? (5 h 20 min)
46. What number must n be if $n+2n+3n+4n = n+2n+3n-4n$. (0)
47. A mower takes petrol and oil in the ratio 25:1. How many mL of oil are put with 5 L of petrol? (200)
48. Write down the first 6 multiples of each of the numbers from 1 to 6. What are the two modes of these numbers? (6, 12)
49. How many edges are there on a regular octahedron (eight triangular faces)? (12)
50. A gallon is about 3.8 litres. To the nearest gallon, how much is 100 litres? (26)