

Number Nest Weekly Challenge

This week's challenge is slightly different. First you have a warm up round, to get your brain in the right mode. Then, there is a challenge about five families. You will need to work through the clues to find out the information about the families.



Warm up round!

1. What is $10,000 - 1,000 + 100 - 10 + 1$? **9091**
2. What is $\frac{1}{32} + \frac{1}{16} + \frac{1}{8} + \frac{1}{4} + \frac{1}{2}$ in its simplest form? **$\frac{31}{32}$**
3. Andrew has more money than Nicky. If Andrew gave Nicky £4, they would have the same amount. While if Nicky gave Andrew £6, Andrew would then have twice as much as Nicky. How much does each one actually have? **Nicky has £26, Andrew has £34**
4. What is $\frac{2}{3}$ of $\frac{3}{10}$ of 90 minus $\frac{5}{6}$ of $\frac{6}{7}$ of 49? **-17**
5. What is 20% of 30% of 450? **27**
6. Two tables each have three boxes of chocolate on them. Each box has four chocolates in them and each chocolate contains five coffee beans. How many coffee beans are on both tables? **120**
7. The mean, median and modal age in years of four children aged at least one-year old is 3. How many possible combinations are there of the four children's ages? (2,3,3,4 is the same as 3,3,4,2) **3**
8. What is the sum of the different prime numbers which divide 735 perfectly. **15**
9. How many two-digit numbers can be formed using only the numbers 1, 2, 3, 4 and 5? Each digit can only be used once for each two-digit number. **20**
10. What is 15% of 40% of 600? **36**



Five Families

House Number	2	4	27	64	97
Family Name	Pine	Oak	Ash	Redwood	Elm
Pet	Leopard	Giraffe	Elephant	Crocodile	Lion
Colour of Car	Red	Black	Orange	Yellow	White
Number of Children	2	1	3	2	5
Holiday Destination	Spain	Germany	Portugal	France	Norway

