**Teamwork 6 Extra Maths Practice Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Guess and Check / Supposition Method**

1. There are 20 coins in a bag. Some are 20-cent coins and some are 50-cent coins. If the total value of the coins is $8.20, how many of each type of coin are there?
2. There are 30 factory workers in a room. Some work 3 hours a day, others work 7 hours a day. If the sum of their working hours in a day is 142 hours, how many workers work for 7 hours a day?
3. There are 85 children with balloons in a hall. The boys are holding 4 balloons each while the girls are holding 9 balloons each. If there are a total of 510 balloons, how many boys are there?
4. There are 125 $5 and $10 notes in a wallet. If the total amount of money is $860, how many of each note are there?

Answers:

1. There are 20 coins in a bag. Some are 20-cent coins and some are 50-cent coins. If the total value of the coins is $8.20, how many of each type of coin are there?

**Assume all are 50 cent coins,**

Total amount 🡪 20 x 50 cents = $10

Extra money 🡪 $10 - $8.20 = $1.80

[the difference between 50 cent and 20 cent is 30 cents]

Number of 20 cent coins 🡪 $1.80 ÷ 30 cents = 6 20 cent coins.

Number of 50 cent coins 🡪 2 0 – 6 = 14 50 cent coins.

**20 cent coins : 6**

**50 cent coins: 14**

1. There are 30 factory workers in a room. Some work 3 hours a day, others work 7 hours a day. If the sum of their working hours in a day is 142 hours, how many workers work for 7 hours a day?

**Assume all workers work 7 hours,**

Total number of hours 🡪 30 x 7 = 210 hours.

Extra hours 🡪 210 – 142 = 68 hours.

[the difference between 7 hours of work and 3 hours is 4 hours]

No. of workers working 4 hours 🡪 68 ÷ 4 = 17

No. of workers working 7 hours 🡪 30 – 17 = 13

**Working 7h : 13 workers**

1. There are 85 children with balloons in a hall. The boys are holding 4 balloons each while the girls are holding 9 balloons each. If there are a total of 510 balloons, how many boys are there?

**Assuming all are girls (9 balloons),**

Total balloons 🡪 85 x 9 = 765 balloons

Extra balloons 🡪 765 – 510 = 255 balloons

[the difference between 9 balloons and 4 balloons are 5 balloons]

Number of boys (4 balloons) 🡪 255 ÷ 5 = 51 boys

**No. of Boys: 51 boys**

1. There are 125 $5 and $10 notes in a wallet. If the total amount of money is $860, how many of each note are there?

**Assuming all are $10 notes,**

Total amount 🡪 125 x $10 = $1250

Extra money 🡪 $1250 – 860 = $390

[Difference between $10 and $5 is $5]

No. of $5 notes 🡪 $390 ÷ $5 = 78 $5 notes **$5 notes: 78 notes**

No. of $10 notes 🡪 125 – 78 = 47 $10 notes **$10 notes: 47 notes**