Independent Activity

I can solve reasoning questions using the formal method of short division.

Solve these reasoning questions. Choose the challenge best for you.

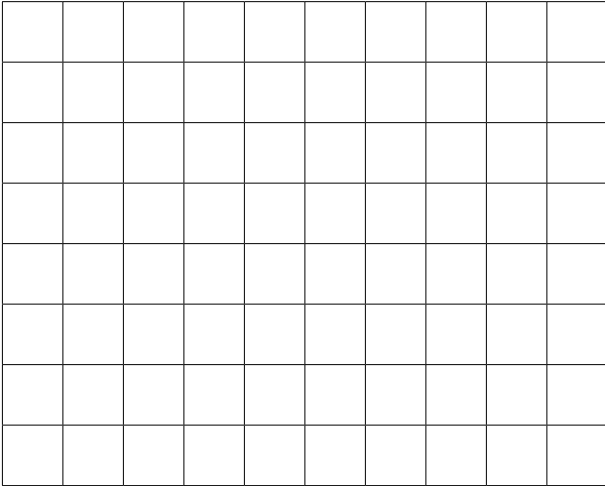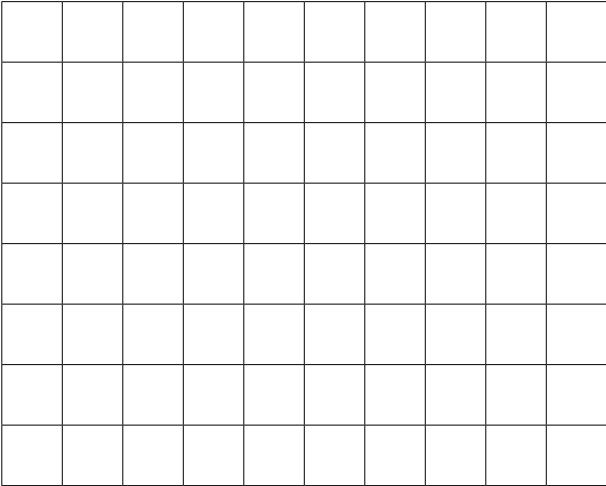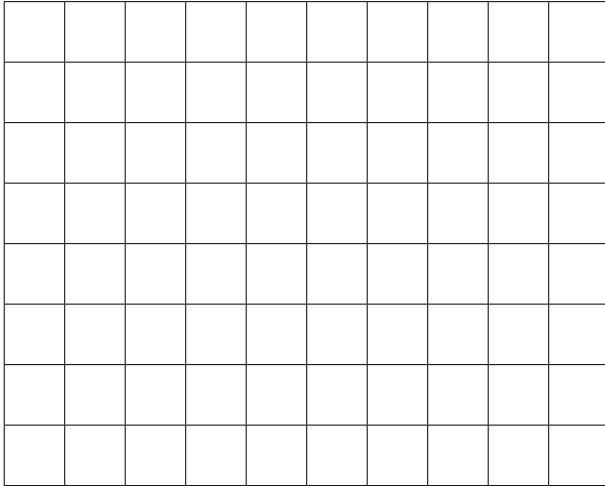| ★	★★	★★★
A biscuit factory has made 900 biscuits. The biscuits are packed into boxes of 12 biscuits. How many boxes can be made? _____ boxes.	A wedding cake contains 4875 grams of flour. The cake is cut into 15 sections. How much flour is in each section? Each section contains _____ grams of flour.	Rufus raises £6846 for charity. He shares the money equally between his 12 chosen charities. How much does each charity receive? Each charity receives _____ .
A bakery sells cupcakes in boxes of 15. How many boxes can be made from 936 cupcakes? Are there any cupcakes remaining? _____ boxes. _____ cupcakes remaining.	If the shoelace attached to a conker is made from 11cm of lace, how many shoelaces can be made from 8375cm of lace? How much lace is remaining? _____ shoelaces. _____ cm of lace remaining.	Tarquin's reading book has 4735 pages. Can Tarquin read 11 pages every night? Explain your answer. _____ _____ _____ _____
A box holds 12 CDs. How many boxes are needed for 558 CDs? _____ boxes.	Eggs are sold in boxes of 12. If a store has 4893 eggs, how many full boxes can be made? _____ boxes.	There are 472 adults and 227 children going to London on coaches. Each coach seats 35 people. How many coaches are needed? _____ coaches.

Independent Activity **Answers**

Question	Answer
A biscuit factory has made 900 biscuits. The biscuits are packed into boxes of 12 biscuits. How many boxes can be made?	
★	**75** boxes.
A wedding cake contains 4875 grams of flour. The cake is cut into 15 sections. How much flour is in each section?	
★★	Each section contains **325** grams of flour.
Rufus raises £6846 for charity. He shares the money equally between his 12 chosen charities. How much does each charity receive?	
★★★	Each charity receives **£570.50**.
A bakery sells cupcakes in boxes of 15. How many boxes can be made from 936 cupcakes? Are there any cupcakes remaining?	
★	**62** boxes. **6** cupcakes remaining.
If the shoelace attached to a conker is made from 11cm of lace, how many shoelaces can be made from 8375cm of lace? How much lace is remaining?	
★★	**761** shoelaces. **4** cm of lace remaining.
Tarquin's reading book has 4735 pages. Can Tarquin read 11 pages every night? Explain your answer.	
★★★	**No – for 430 days, he can read 11 pages a night and for one night, he will read five pages.**
A box holds 12 CDs. How many boxes are needed for 558 CDs?	
★	**47** boxes.

Eggs are sold in boxes of 12. If a store has 4893 eggs, how many full boxes can be made?	
★★	**407** boxes.
There are 472 adults and 227 children going to London on coaches. Each coach seats 35 people. How many coaches are needed?	
★★★	**20** coaches.

Talk Partner Activity

I can solve reasoning questions using the formal method of short division.

Work with your partner to discuss and solve these reasoning questions.

A factory makes 7884 wax crayons. Wax crayons come in packs of 12. How many packs can the factory make?	A company produces tennis balls. Each pack contains 11 balls. How many packs can be made from 7564 balls? Are there any tennis balls remaining?	A pack contain 50 stickers. How many full packs can be made from 6383 stickers?
Use this space for jottings:	Use this space for jottings:	Use this space for jottings:
_____ packs.	_____ packs. _____ tennis balls reamining.	_____ packs.

Talk Partner Activity **Answers**

Question	Answer
1.	A factory makes 7884 wax crayons. Wax crayons come in packs of 12. How many packs can the factory make?
	657 packs.
2.	A company produces tennis balls. Each pack contains 11 balls. How many packs can be made from 7564 balls? Are there any tennis balls remaining?
	687 packs. **7** tennis balls remaining.
3.	A packs contain 50 stickers. How many full packs can be made from 6383 stickers?
	127 packs.