

Lesson Printables

Be a rockstar and only print what you need!



Planners: 2-3

Piggy Banks

Sunlight: 4

Twilight: 5

Midnight: 6

Extras

Recording Log: 7

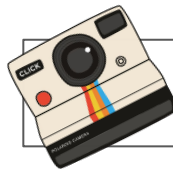
Small Recording Log: 8

Answers: 9

**Printing in the US? Scale to 'fit to printable area' in order to get the best print.*

LESSON 1: Money - Introduction to money (coins)

Starter	Main Activity and Input: Using different coin combination to make certain amounts of money.	Plenary
<p>River Crossing: The numbers 1 to 9 want to cross the river in rowing boats. What are some possible 3-digit numbers that meet each row boat criteria?</p> <p>To support:</p> <ol style="list-style-type: none">1. Review how to identify if a number is odd or even and that multiples of 5 end in 0 or 5. <p>To challenge:</p> <ol style="list-style-type: none">1. What are the 3 biggest numbers students can make that meet the criteria? The 3 smallest numbers?	<p>Input:</p> <ol style="list-style-type: none">1. Slide 6 shows a piggy bank. What do students already know about their money system? Discuss ideas a class. E.g. We use pounds and pence. Pounds are worth more than pence. We have notes and coins that have different values. At this point, if you have money manipulatives, you could get them out for students to play and explore with.2. Slide 7 shows the coins used in the UK. What value do each of the different coins have? How are some of the coins connected? Students could write their ideas on whiteboards and then share as a class. Slide 8 reveals the value of each coin using the 'p' or '£' symbols. It also explains that 100 pennies are equivalent to 1 pound. What other coins can be used to make £1? Students could use coin manipulatives to show you their ideas. <i>Note, we don't explicitly go into different coin combinations, but you might discuss counting in 10p coins until you reach 100, which means you have made £1. This could repeat for 20p coins, 50p coins, etc. You could repeat this with different coins in order to emphasise that 100p, using any combination, of coins always equals £1.</i>3. Slides 9 to 14 model the main activity. There are piggy banks with different amounts of money on them. Students are asked to work out a combination of coins that could be in each piggy bank. Students could use coin manipulatives or draw money circles to show how they could make a particular amount of money. We have used tape diagrams to show how the coins add up to the desired piggy bank amount. Note, slide 11 models the 'Midnight' activity, which provides a money amount and the number of coins used to make that amount. Students will need to be creative in how they make the piggy bank amount. <p>Activity: Use coin combinations to match the totals shown on different piggy banks.</p> <ol style="list-style-type: none">1. Print and cut out the piggy banks for each learning zone. These could be placed in piles in your classroom. Students could work in pairs or small groups and take one piggy bank at a time, make the amount and then return the piggy bank to a shared pile. Students could make the money amounts using coin manipulatives or by drawing money circles. Students do not need to complete all of the piggy bank challenges. <p>To support:</p> <ol style="list-style-type: none">1. Sunlight Zone piggy banks are £2 or less.2. Print the recording logs found in the printables in order to help students organise their thinking. <p>To challenge:</p> <ol style="list-style-type: none">1. Encourage students to draw a tape diagram or use a number sentence to prove their thinking.2. Is there more than 1 way to make the piggy bank amount? Prove it!3. Midnight Zone includes specific coin amounts, so students have to think creatively about how to make a particular piggy bank amount.	<p>Mystery Money:</p> <p>If 5 coins (2 of the same, 3 unique) are hidden in the hat, what could the amount of money be?</p> <p>Check for understanding:</p> <ol style="list-style-type: none">1. Can students identify 5 coins that would work and calculate how much money they are worth?



Peek at the Printables:

Things that might be useful for this lesson:

- Individual whiteboards:
 - Help students to record their thinking and share ideas with others.
- Coin manipulatives:
 - Can be used to explore making specific money amounts.

Sunlight Zone	Twilight Zone	Midnight Zone																																				
<p>Sunlight Piggy Banks</p> <table border="1"> <tr> <td>Can you make 12p</td> <td>Can you make 35p</td> <td>Can you make 60p</td> <td>Can you make 28p</td> </tr> <tr> <td>Can you make 16p</td> <td>Can you make 85p</td> <td>Can you make 99p</td> <td>Can you make £1</td> </tr> <tr> <td>Can you make £1 and 25p</td> <td>Can you make £1 and 55p</td> <td>Can you make £1 and 74p</td> <td>Can you make £2</td> </tr> </table>	Can you make 12p	Can you make 35p	Can you make 60p	Can you make 28p	Can you make 16p	Can you make 85p	Can you make 99p	Can you make £1	Can you make £1 and 25p	Can you make £1 and 55p	Can you make £1 and 74p	Can you make £2	<p>Twilight Piggy Banks</p> <table border="1"> <tr> <td>Can you make 23p</td> <td>Can you make 37p</td> <td>Can you make 62p</td> <td>Can you make 28p</td> </tr> <tr> <td>Can you make 16p</td> <td>Can you make 85p</td> <td>Can you make 99p</td> <td>Can you make £1 and 7p</td> </tr> <tr> <td>Can you make £1 and 75p</td> <td>Can you make £2 and 15p</td> <td>Can you make £3 and 14p</td> <td>Can you make £3 and 29p</td> </tr> </table>	Can you make 23p	Can you make 37p	Can you make 62p	Can you make 28p	Can you make 16p	Can you make 85p	Can you make 99p	Can you make £1 and 7p	Can you make £1 and 75p	Can you make £2 and 15p	Can you make £3 and 14p	Can you make £3 and 29p	<p>Midnight Piggy Banks</p> <table border="1"> <tr> <td>Can you make 12p</td> <td>Can you make 35p</td> <td>Can you make 60p</td> <td>Can you make 28p</td> </tr> <tr> <td>Can you make 16p</td> <td>Can you make 85p</td> <td>Can you make 99p</td> <td>Can you make £1</td> </tr> <tr> <td>Can you make £1 and 25p</td> <td>Can you make £2 and 15p</td> <td>Can you make £3 and 14p</td> <td>Can you make £5</td> </tr> </table>	Can you make 12p	Can you make 35p	Can you make 60p	Can you make 28p	Can you make 16p	Can you make 85p	Can you make 99p	Can you make £1	Can you make £1 and 25p	Can you make £2 and 15p	Can you make £3 and 14p	Can you make £5
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Greener Alternatives:

- Rather than printing the cards, you could place whiteboards in stations around the class with different money amounts written on them. Students can move between the stations, showing different ways they could make the desired amount.



Sunlight Piggy Banks

Can you make:



Can you make:



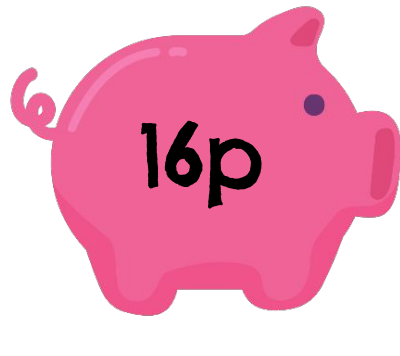
Can you make:



Can you make:



Can you make:



Can you make:



Can you make:



Can you make:



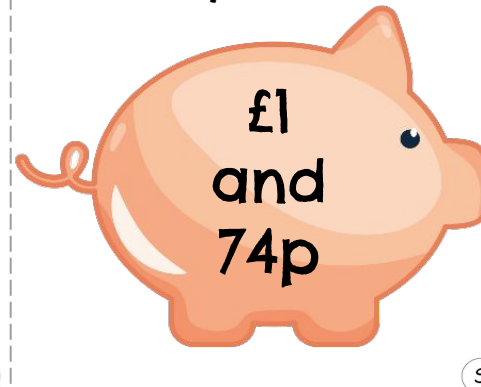
Can you make:



Can you make:



Can you make:



Can you make:



Twilight Piggy Banks

Can you make:



Can you make:



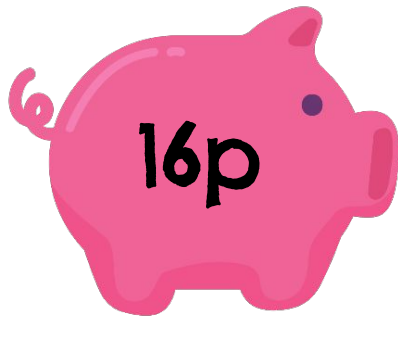
Can you make:



Can you make:



Can you make:



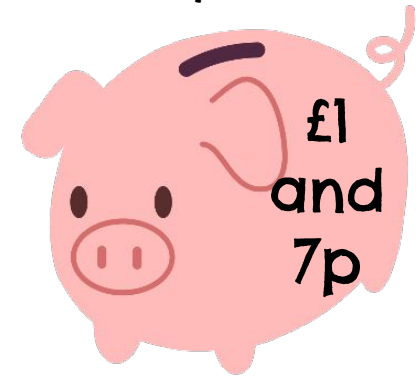
Can you make:



Can you make:



Can you make:



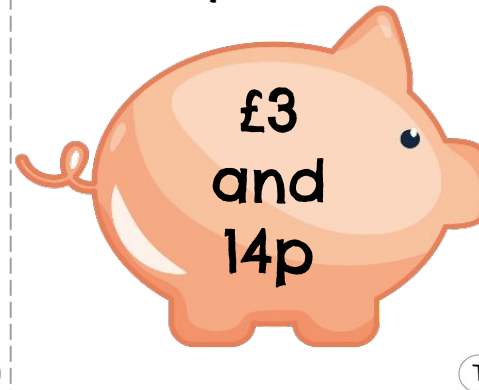
Can you make:



Can you make:



Can you make:



Can you make:



Midnight Piggy Banks

Can you make...



...using 3 coins?



Can you make...



...using 4 coins?



Can you make...



...using 5 coins?



Can you make...



...using 6 coins?



Can you make...



...using 4 coins?



Can you make...



...using 4 coins?



Can you make...



...using the fewest amount of coins?



Can you make...



...using 5 coins?



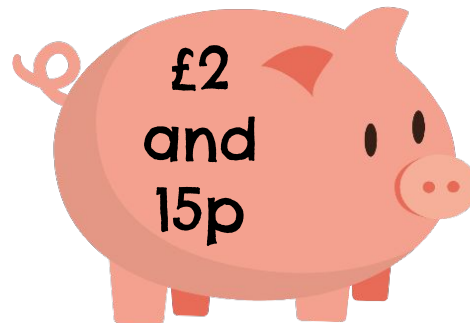
Can you make...



...using 4 coins?



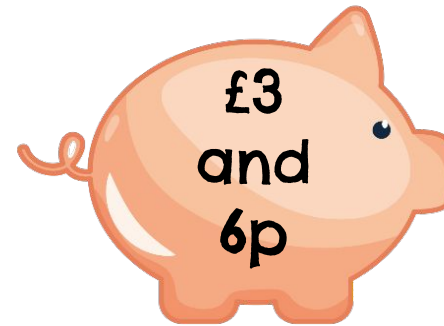
Can you make...



...using 5 coins?



Can you make...



...using 5 coins?



Can you make...



...using 8 coins?



Recording Log




Piggy Bank
Amount

How I made it:

Piggy Bank Amount	How I made it:

Small Recording Logs

 Piggy Bank Amount	How I made it:

 Piggy Bank Amount	How I made it:

Midnight Answers

Answers will vary. Below are possible solutions to Midnight piggy banks.

12p	$5p + 5p + 2p$ or $10p + 1p + 1p$
35p	$10p + 10p + 10p + 5p$ or $20p + 5p + 5p + 5p$
60p	$20p + 20p + 10p + 5p + 5p$ or $50p + 5p + 2p + 2p + 1p$
28p	$10p + 5p + 5p + 5p + 2p + 1p$ or $20p + 2p + 2p + 2p + 1p + 1p$
16p	$5p + 5p + 5p + 1p$ or $10p + 2p + 2p + 2p$
85p	$50p + 20p + 10p + 5p$ (only solution)

99p	$50p + 20p + 20p + 5p + 2p + 2p$
£1	$50p + 20p + 20p + 5p + 5p$ or $50p + 20p + 10p + 10p + 10p$
£1 and 25p	$£1 + 10p + 10p + 5p$ or $50p + 50p + 20p + 5p$
£2 and 15p	$£1 + £1 + 5p + 5p + 5p$ or $£2 + 10p + 2p + 2p + 1p$
£3 and 6p	$£2 + £1 + 2p + 2p + 2p$ or $£2 + 50p + 50p + 5p + 1p$
£5	$£2 + £1 + 50p + 50p + 50p + 20p + 20p + 10p$ or $£2 + £2 + 50p + 20p + 20p + 5p + 2p + 3p$