Unit 3
Money and place value

Five daily lessons

Primary
National Strategy

Year 1
Autumn term

This Unit Plan is designed to guide your teaching.

You will need to adapt it to meet the needs of your class.

Unit Objectives

Year 1

Begin to know what each digit in a two-digit number represents. Partition a 'teens' number and begin to partition large two-digit numbers into a multiple of 10 and ones (TU).	Page 8
Within the range 0 to 30, say the number that is 1 or 10 more or less than any given number.	Page 12
Recognise coins of different values. Find totals and change from up to 20p. Work out how to pay an exact sum using smaller coins.	Page 68
Use mental strategies to solve simple problems set in 'real life' money or measurement contexts, **using counting, addition, subtraction, doubling and halving, explaining methods and reasoning orally**.	Page 68

Link Objectives

Reception

Sort coins, including the £1 and £2 coins, and use them as role-play to pay and give change.

Use developing mathematical ideas and methods to solve practical problems.

Find one or more or one less than a number from 1 to 10.

Year 2

Recognise all coins and begin to use £. p notation for money. Find totals, give change, and work out which coins to pay.

Use mental addition and subtraction, simple multiplication and division, solve simple word problems involving numbers on 'real life' money or measures, using one or two steps. Explain how the problem was solved.

Know what each digit in any two-digit number represents, including 0 as a placeholder and partition two-digit numbers into a multiple of 10 and ones (TU).

(Key objectives in bold)

Resources needed to teach this unit:

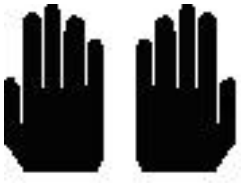
Resource sheet 3.1
Resource sheet 3.2
OHT 3.1 or penny number line
OHT 3.2 or ITP 'Counting on and back'
Activity sheet 3.1
Activity sheet 3.2
Dice marked 1p more/ 1p less
100 bead string
1p, 2p coins
Mega money
Money bank/purse
Puppet
Beanbag
Items for a class shop
Sale sign
Digit cards
0-20 number line
Two pairs of gloves
Objects for counting
0-20 number cards, washing line and pegs
Tin and pennies
0-50 number line

See Models and Images Charts:
Counting on and back in tens;
Partitioning and recombining;
Ordering numbers to 100;
Understanding addition and subtraction.

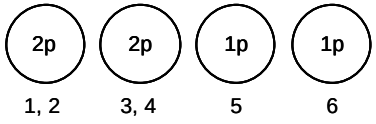
department for education and skills

Planning sheet	Day One	Unit 3 *Money and place value*	Term: *Autumn*	Year Group: *1*

Oral and Mental

Objectives and Vocabulary	Teaching Activities
Count in tens from and back to zero. VOCABULARY ones tens count on count back RESOURCES Fingers! 100 bead string	Use ten fingers to count in tens from 0 to 100 and back again.  '10' Hold up both hands for each tens number. Show the children the 100-bead string. Count beads in ones to establish that there are ten beads in each colour. Count in tens forwards and backwards using bead string.

Main Teaching

Objectives and Vocabulary	Teaching Activities
Recognise 1p and 2p coins. Find totals up to 10p (using 1p/2p coins). VOCABULARY money coin penny pence total price RESOURCES 1p coins 2p coins Mega money (large coins) Activity sheet 3.1 A money bank or purse	Give each child a real 1p coin and a real 2p coin to hold. Discuss what they look like. **Q** What is the same about these two coins? **Q** What is different? **Q** Which would you rather have? Why? Ask the children to hold up a one penny coin, then a two pence coin. Give out further coins so that each individual has an amount up to 6p, using 1p and 2p coins. Say to the children: - stand up if you have a total of 3 pence. - stand up if you have a total of 6 pence. **Q** Who has a 2 pence coin? **Q** Who has two 1 penny coins? **Q** Which is worth more? Repeat for different amounts, comparing the combinations of coins used. Demonstrate using large coins how to count 2p coins by tapping the coin twice to keep track of how much money has been counted. Use the large coins to demonstrate how to group 2p coins, counting these first when counting a mix of one penny and two pence coins.  Give out Activity sheet 3.1. Ask children to find the amount of money in each purse and label it.

Plenary

Teaching Activities/ Focus Questions

Discuss children's responses to Activity sheet 3.1.

Q Which was the hardest? Why? The easiest? Why?

Show children a money bank or purse.

Q There is 6p in this purse. What coins could there be?

Invite children to show you using large coins.

By the end of the lesson, children should be able to:

recognise 1p and 2p coins;
find totals using 1p and 2p coins.

(Refer to supplement of examples, section 5, page 68.)

Planning sheet	Day Two	Unit 3 *Money and place value*	Term: *Autumn*	Year Group: *1*

Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	**Teaching Activities**	**Objectives and Vocabulary**	**Teaching Activities**	**Teaching Activities/ Focus Questions**
Count in tens from and back to zero. Count reliably up to 10 objects (sounds, actions). VOCABULARY count on count back ones tens how many? RESOURCES 100 bead string ITP 'counting on and back' Digit cards (1-9)	Use the 100 bead string or interactive teaching program to count in tens from 0 to 100 and back. Choose a volunteer – show them a digit card and ask them to jump, hop, clap, blink etc. that many times. Ask the other children to count to work out what the digit card was. Repeat.	Solve simple problems involving 1p and 2p coins. Find totals up to 10p. VOCABULARY money coin total pence cost price RESOURCES Items for a shop 1p and 2p coins Mega money Resource sheet 3.1 Activity sheet 3.2	Set up a shop and price items using labels on Resource sheet 3.1. Invite volunteers to choose an item and pay for it using the exact amount. Give them real 1p and 2p coins and demonstrate to the other children how they paid using the Mega money. **Q** Which coins did Amy use? **Q** Is there another way to pay? Repeat several times. Work with one group on the carpet and continue 'shopping'. Sit the children in a circle and put items from the shop in the middle. Give each child an amount using 1p and/or 2p coins. Ask each to find their total amount and say what they could buy. **Q** How much money have you got? **Q** Have you got enough to buy the…? **Q** Will you have any money left? Give the other children each a copy of Activity sheet 3.2, a collection of 1p and 2p coins and a selection of price labels from Resource sheet 3.1. Ask each child to choose their own price labels, write them on the purse labels, find the correct coins and then draw them on the purses.	**Q** How many different ways could we use one penny and/or two pence coins to make 10p? Ask for volunteers to show their answers using the large coins. Record answers on the board. HOMEWORK – Draw all the ways you can make 5p using only one penny and/or two penny coins. **By the end of the lesson, children should be able to:** **find totals up to 10p;** **work out how to pay for items using 1p and 2p coins.** (Refer to supplement of examples, section 5, page 68.)

Planning sheet	Day Three	Unit 3 *Money and place value*	Term: *Autumn*	Year Group: *1*

Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	**Teaching Activities**	**Objectives and Vocabulary**	**Teaching Activities**	**Teaching Activities/ Focus Questions**
Count on or back in ones from any digit up to 20. VOCABULARY ones count on count back RESOURCES Puppet Beanbag	Sit the children in a circle. Make the puppet say '6, 7, 8'. Ask children to say the next three numbers (9, 10, 11). Now make the puppet say '15, 14, 13'. The children should respond, '12, 11, 10'. Repeat, focussing on numbers 10-20. Say a number e.g. 10 and throw a beanbag to a child. Ask the child to say the next number, 11. Ask the child to throw the beanbag to someone else who will say the next number. When you reach 20, repeat, this time counting back in ones from 20.	Say the number that is 1 more or 1 less than any given number to 20. Solve simple problems involving money. VOCABULARY 1p more 1p less cost price RESOURCES Sale sign Shop items and price labels (from day 1) and extra price labels 10p-19p from Resource sheet 3.2 Penny number line or OHT 3.1 Dice marked 1p more/1p less	Ask children to share the ways they made 5p for last lesson's homework task. Introduce a 'sale' sign to the class for the class shop. **Q** What does this sign say? **Q** What does it mean? Say that in our sale everything used yesterday in the class shop has 1p off. **Q** What does 1 penny off mean? **Q** Is the new price more or less than the old price? **Q** If the old price was 4 pence what is the new price? Use a numberline made of pennies (e.g. large coins on a washing line, magnetic pennies on a board, or use OHT 3.1). Demonstrate how to count back on this number line to find 1p less. Using this method invite individuals to make new price labels for some of the items in the shop. Sit the children in a circle and give each pair a price label up to 10p (from yesterday). Ask children to work out the new price and hold the new sale price (i.e. 1p less than their card) in their head. **Q** I have 3p to spend, whose sale price is 3p? Check that the child has a label saying 4p. Emphasise this to children i.e. label says 4p, therefore sale price is 3p. Give the 3p to the child in exchange for 4p label. Repeat, referring to penny number line. When the children are confident, repeat with prices from 10p to 20p.	Sit children in two groups to play 'Penny Less/ Penny More'. Name the teams A and B. Put 10 items (with 2p-19p price labels) in middle of teams. Each team takes turns to roll a dice marked (1p more/ 1p less). A child from the team chooses an item and the team agree the changed price. If correct, team keeps item. **Q** How much does the item you have chosen cost? **Q** What is the dice telling you to do? **Q** How much will it cost now? Will it be cheaper or more expensive? The winning team is the team with the most items. **By the end of the lesson, children should be able to:** ?? **say the number that is 1 more/1 less than any number to 20;** ?? **solve simple money problems.** (Refer to supplement of examples, section 5, pages 12 and 68.)

Planning sheet	**Day Four**	**Unit 3** ***Money and place value***	**Term:** ***Autumn***	**Year Group:** ***1***
Oral and Mental		**Main Teaching**		**Plenary**
Objectives and Vocabulary	**Teaching Activities**	**Objectives and Vocabulary**	**Teaching Activities**	**Teaching Activities/ Focus Questions**
Count reliably up to 20 objects. Say and read whole numbers 1 to 20. VOCABULARY count how many teen number RESOURCES Tin Pennies 11-20 number cards 100 bead string	Drop pennies into a tin asking children to count the sounds that are made. Ask children to respond using their fingers. Show how many pennies there are in the tin. **Q** How much money is in my tin? Give each child a teens number card. Ask the children to get up and find someone with the same number card. Point to each pair and ask them to say their number in a silly voice or like a lion, mouse, etc.. Show the children 11 beads on the string. **Q** How many beads are at this end of the string? Do you need to count them all? Agree that you don't need to count the first 10. Repeat with other numbers between 10 and 20. Emphasise the group of 10 and count on from 10 to demonstrate finding the total number of beads.	Read and write numbers 0 to 20. Partition a teens number. VOCABULARY ten ones 'teens' number altogether RESOURCES 0-20 number line 11-19 number cards Two pairs of gloves (different colours) Washing line and pegs	Count along a number line 0-20 emphasising the 'teens' numbers. Point to 'teens' numbers in random order. **Q** What number is this? **Q** Is the number more or less than 10? Put on a pair of gloves. **Q** How many fingers can you see? Invite a volunteer to put on a second pair of gloves. **Q** If Robbie and I hold up all our fingers, how many will there be altogether? **Q** If Robbie and I want to show 15 fingers how can we do it? I want to show all my fingers. How many will Robbie show? Write on the board 10 and 5 is 15. Demonstrate counting 10 by showing two hands on one person and then counting in ones raising fingers to show 15. Repeat process for other 'teens' numbers using different children to help. Give each child a 'teens' number card, ensuring they can say the number to you. Ask each child to draw around their hands to illustrate their number. (One group might use paint to produce handprints.) They should record the number underneath their drawing.	Ask children to bring their handprints/drawing and 'teens'card to the carpet. Choose a child to hold up their drawing but not their 'teens' card. **Q** What number did Ravi have? **Q** How do you know? Ask the child to show the number card to reinforce the image with the number. Repeat for other numbers showing how to count on from 10. Select a set of drawings to order, pegging them onto a line. Peg the appropriate, 'teens' number card underneath the 'hands picture'. **Q** So 12 is 10 fingers (two hands) and how many more fingers? **By the end of the lesson, children should be able to:** **read numbers to 20;** **say which number is the same as: one ten and seven ones.** (Refer to supplement of examples, section 5, page 8.)

Planning sheet	Day Five	Unit 3 *Money and place value*	Term: *Autumn*	Year Group: *1*

Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	**Teaching Activities**	**Objectives and Vocabulary**	**Teaching Activities**	**Teaching Activities/ Focus Questions**
Count in tens from and back to zero. VOCABULARY count on count back tens RESOURCES 100 bead string ITP 'Counting on and back'	Choose ten children to stand in a line. Ask the class to count in tens to 100 as each child in line shows 10 fingers. Repeat counting back as the children fold down their fingers. Repeat with a different 10 children. Stop part way through. **Q** How many fingers are showing so far? Use the 100 bead string or the ITP 'Counting on and back' to count on from zero and back in tens from 100, moving beads as you do.	Begin to know what each digit represents in a two-digit number. Begin to partition larger two-digit numbers. VOCABULARY tens ones count on how many altogether? RESOURCES Bead string or OHT 3.2 Gloves 0-50 number line Objects for counting e.g. counters, cubes	Put 23 beads to one end of the string (or use OHT 3.2). **Q** How many beads are there? Do you need to count them all? Repeat with other two-digit numbers, drawing out the strategy of counting the tens first, rather than each individual bead. Put on the gloves used on day 4. Flash your hands at children twice. **Q** How many fingers did you see? Repeat for different multiples of 10 – encourage children to keep count by whispering. Invite volunteers to show multiples of tens using hands. **Q** How many times did Sonya flash her hands? **Q** How many fingers did she show? Gradually extend to other two-digit numbers up to 50 e.g. 43 (4 flashes of both hands and 3 fingers). **Q** How can you show 32? Put a large quantity of objects to count (between 20 and 50) on the floor where all the children can see them. **Q** How can you find out how many counters there are? Discuss putting the objects into groups of ten to make it easier. Provide each group with a large quantity of objects. Tell them to find out how many objects there are altogether on their tables, grouping them first in tens to count them. Objects could include: counters (put 10 into each cup) pennies (10 in a purse) straws (10 into a bundle) pencils (10 into a pots) cubes (10 into a tower) books (10 into a pile)	Stay in groups and as a class find out how many objects are on each table. Demonstrate how to count how many altogether by counting in tens and then continuing count in ones e.g. 10, 20, 30, 31, 32, 33. Say 33 is 30 and 3 more. Help children to locate the number of objects counted on each table on a number line. Draw out that 33 for example comes after 30. **By the end of the lesson, children should be able to:** **begin to partition larger numbers.** (Refer to supplement of examples, section 5, page 8.)