



Numbers to 5

Resources: a set of number cards made from BLM 1 'Numbers Cards 0–5', coloured pencils, whiteboard, sheet of paper, NTO F.1 'This Old Man', NTO F.2 'Numbers Rumba', NTO F.4 'Numbers'

1 Ask the student to write the following numbers:

3 1 4 2 5

- **2** Using a set of number cards made from BLM 1 'Number Cards 0–5', have the student read the number cards in random order.
- **3** Lay out a set of number cards with the numbers 1 to 5. Ask the student to point to 4, 1, 3, 5 and 2.
- 4 Give the student the set of number cards 1 to 5, and have them arrange the numbers in the correct sequence.

Number and place value

Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point (ACMNA001)

Foundation: Assessment Task Card				
Unit 1	Numbers to 5 TARGETED ASSESSMENT			
Q1	Provide the student with a set of number cards 1 to 5 and have them practise tracing over the numbers many times, choosing a different colour each time. When the student begins in the correct place and can trace, have them write the numbers 1 to 5 on a small whiteboard or sheet of paper.			
Q2	Use NTO F.4 'Numbers' to randomly generate numbers for the student to read. Make use of everyday experiences to read the numbers 1 to 5, e.g. the pages in a book, the numbers on classrooms.			
Q3	Present the student with two or three number cards or generate two or three numbers using NTO F.4 'Numbers'. Have them look at the numbers and ask them to point to a particular one.			
Q4	Revise the counting sequence by singing number songs, e.g. 'This Old Man' in NTO F.1 'This Old Man' and 'Numbers Rumba' in NTO F.2 'Numbers Rumba'. Give the student a set of number cards to put in the correct sequence. Ask which number comes first and then have them find that card. Continue asking which number comes next and having them find the card until the sequence is correct. Repeat until the student can sequence numbers independently.			
Number and place value Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point (ACMNA001)				





Counting to 5

Resources: teddy counters, a set of number cards made from BLM 1 'Numbers Cards 0–5', sheet of paper, coloured pencils, NTO F.7 'Can You Count?', a group of familiar objects, e.g. pencils or balls, NTO F.9 'How Many?'

- 1 Have the student grab a small handful of teddy counters. Ask them to count how many they have.
- 2 Using a set of number cards made from BLM 1 'Numbers Cards 0–5', hold up a card and ask the student to make a group of that many counters. Repeat for the other cards.
- **3** Give the student a set of number cards from 1 to 5 and show them a group of four counters. Ask them to find the number card that shows how many counters there are. Repeat for the other numbers.
- 4 Ask the student to draw 5 flowers and to colour 3 of them red. Ask them to draw 5 pencils and to colour 2 of them blue.

Number and place value Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002)







Groups of Things

Resources: a set of cards made from BLM 10 'Number Match 1', counters, NTO F.8 'Picture Counting'

- 1 Randomly show the student the set of cards made from BLM 10 'Number Match 1' and have them read them, noting any problems with specific types of representation.
- 2 Have the student match the cards into sets that include the numeral, word and pictorial representation.
- **3** Select a card, e.g. one showing a pictorial representation of 3, and ask the student to make a group of the same number of counters.
- 4 Have the student make a group of counters that has more.
- 5 Have the student make a group of counters that has less.

Number and place value

Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) Compare, order and make correspondences between collections, initially to 20, and explaining reasoning (ACMNA289)





Location

Resources: blocks, small cars, a set of cards made from BLM 13 'Location Words', NTO F.14 'Farmyard'

- 1 Place some blocks and small cars on a table or the floor where the student can clearly see them. Ask the student to:
 - point to the car that is **near** the red block.
 - point to the block that is **next to** the red car.
 - point to the block that is **between** the blue and green blocks.
- 2 Ask the student to move one of the cars:
 - forwards towards the yellow block.
 - **around** the green block.
 - over the red block and leave it near the green block.
- **3** Give the student a set of word cards made from BLM 13 'Location Words', e.g. near, between, through. Ask them to tell you a path you can take using those words to get the girl to the horses on NTO F.14 'Farmyard'.

Location and transformation Describe position and movement (ACMMG010)



Foundation: Assessment Task Card							
Unit 5	More Resou NTO F Hive',	Countir rces: a se 7.23 'Num NTO F.10	ng at of num aber Mat 6 'Zoom,	ber cards r Random', Zoom!'	made fro , NTO F.4	m BLM 1 I 'Numbe	l 'Number Cards 0–5' and BLM 2 'Number Cards 6–10', ers', NTO F.47 'Simple Number Line', NTO F.5 'Here Is a
1	Ask th	e studer	nt to cou	int up to 6	6 and th	en coun	t back from 6.
2	Rando 'Numk Rando 0–5' a when	omly sho per Card omly sho nd BLM counting	w numb s 0–5', a w numb 2 'Num g.	er cards f and ask th er cards 1 ber Cards	rom 0 to le studer 1 to 6 fro 6–10', s	5 from nt to nai om a set and ask	a set of number cards made from BLM 1 me the number that comes after when counting. 3 of number cards made from BLM 1 'Number Cards the student to name the number that comes before
4	Show	the stud	lent the 1	following s	sequenc	e and a	sk them which number is missing:
5	U Show	ا the stud	2 lent the 1	उ following ध	sequenc	b e and a	б sk them which number is missing:
	6	5	4		2	1	0
Number and place value Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point (ACMNA001)							

Foundation: Assessment Task Card				
Unit 5	More Counting TARGETED ASSESSMENT			
Q1 Q2	Practise the counting sequence by using NTO F.5 'Here Is a Hive' and NTO F.16 'Zoom, Zoom!'. Use NTO F.23 'Number Mat: Random', which requires the student to identify the next number in the counting sequence of numbers randomly generated.			
Q3	Have the student practise counting up to numbers randomly generated by NTO F.4 'Numbers' and then naming the number that comes before.			
Q4	Present NTO F.47 'Simple Number Line' and have the student count the numbers up to 6. Then move the frog to cover one of the numbers and ask the student to identify the number the frog is covering.			
Q5	Provide the student with a set of number cards from 0 to 6 but with one card removed. Have them order the numbers from 6 to 0 and identify which number is missing.			
Number and place value Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point (ACMNA001)				



Unit 6

Dot Patterns

Resources: NTO F.19 'Dot Cards: Matching Numbers', BLM 15 'Dot Patterns', NTO F.4 'Numbers'

Present NTO F.19 'Dot Cards: Matching Numbers' and check if the student can automatically recognise how many dots.
 Give the student a set of cards made from BLM 15 'Dot Patterns'. Present NTO F.4 'Numbers' and randomly generate a number from 0 to 6. Have them read the numbers and find the matching number card.
 Give the student a set of cards made from BLM 15 'Dot Patterns'. Show them a card and have them select a card that is more than the dot pattern displayed.
 Give the student a set of cards made from BLM 15 'Dot Patterns'. Show them a card and have them select a card that is less than the dot pattern displayed.

Number and place value Subitise small collections of objects (ACMNA003)



Foundation: Assessment Task Card				
Unit 7	Length Resources: Unifix blocks, a piece of string about 10 cm long, blocks			
1	Have the student make a tower with Unifix blocks. Then have them make a tower that is taller and one that is shorter . Ask them to point to the tallest tower.			
2	Give the student a piece of string and ask them to find three things in the classroom that are longer than the piece of string.			
3	Ask the student to order the piece of string and the three classroom objects from the shortest to the longest .			
4	Give the student the piece of string and ask them to find something that is the same length .			
Using units of measurement Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language (ACMMG006)				

Foundation: Assessment Task Card				
Unit 7	Length TARGETED ASSESSMENT			
Q1	Provide the student with Unifix blocks and ask them to build something. Then ask them to build something taller. Have them build something else. Ask, 'Which is taller? How do you know?'			
Q2	Use items personal to the student, e.g. pencil case or shoe, and have them find something longer. Discuss with them how they know which item is longer.			
Q3	Use everyday classroom experiences for the student to directly compare common objects, e.g. pencils, rulers, books.			
Q4	Have a classroom 'treasure hunt' whereby the student finds things that are the same length as common objects.			
Using units of measurement Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language (ACMMG006)				



U	nit	
C	8	

Numbers to 10

Resources: NTO F.4 'Numbers', a set of number cards made from BLM 1 'Number Cards 0–5' and BLM 2 'Number Cards 6–10', a set of number cards made from BLM 10 'Number Match 1' and BLM 11 'Number Match 2', NTO F.1 'This Old Man', NTO F.2 'Numbers Rumba'

- 1 Present NTO F.4 'Numbers', and have the student read the numbers randomly generated.
- 2 Give the student a set of cards made from BLM 1 'Number Cards 0–5' and BLM 2 'Number Cards 6–10', and have them put the cards in order from 0 to 10.
- **3** Using the picture cards from BLM 10 'Number Match 1' and BLM 11 'Number Match 2', show the student the cards randomly and ask them how many they can see.

Number and place value

Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) (C Subitise small collections of objects (ACMNA003) (C

Foundation: Assessment Task Card				
Unit 8	Numbers to 10 TARGETED ASSESSMENT			
Q1	Read picture books containing numbers to the student. Have them identify numbers to 10 that occur in the school environment, e.g. room numbers.			
Q2	Have the student practise the counting sequence to 10 by singing songs, e.g. 'This Old Man' in NTO F.1 'This Old Man' and 'Numbers Rumba' in NTO F.2 'Numbers Rumba'. Give the student a set of number cards made from BLM 1 'Number Cards 0–5' and BLM 2 'Number Cards 6–10', and as they sing the songs, have them hold up the card of the number they are singing and place in order as the songs continue.			
Q3	Look for opportunities in the classroom to have the student count groups of objects, e.g. pencils in containers, chairs at table, students sitting on the mat.			
Number and place value Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) (Subitise small collections of objects (ACMNA003) (





Counting with Numbers to 10

Resources: NTO F.4 'Numbers', a set of number cards made from BLM 1 'Number Cards 0–5' and BLM 2 'Number Cards 6–10', a set of cards from BLM 10 'Number Match 1' and BLM 11 'Number Match 2', NTO F.47 'Simple Number Line', BLM 20 'In the Pond', BLM 8 'Blank Cards'

- **1** Use NTO F.4 'Numbers' to generate numbers and have the student count forwards from the number generated.
- **2** Ask the student to count backwards from 10.
- 3 Select cards randomly from a set of number cards made from BLM 1 'Number Cards 0–5' and BLM 2 'Number Cards 6–10', and ask the student to count back from the number selected.
- 4 Randomly select word cards from a set of number cards made from BLM 10 'Number Match 1' and BLM 11 'Number Match 2', and ask the student to read the word and write the corresponding numeral.

Number and place value

Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point (ACMNA001)

Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) 🚱

Foundation: Assessment Task Card 9 TARGETED ASSESSMENT Counting with Numbers to 10 Q1 Sing number songs, and as the student sings the songs, have them place the number cards from a set of cards made from BLM 1 'Number Cards 0–5' and BLM 2 'Number Cards 6–10' in the correct order. Have the student practise reading the numbers to 10 by pointing to each number. Then have them turn over the first card and start counting from 2, pointing to the cards as they go. Have them repeat counting from 2 with their eyes closed. Repeat for other starting points, having them turn over the card before the starting number and counting with eyes open and then closed. Q2 To practise counting backwards from 10, have the student play counting games, e.g. 'Zero, I'm Out'. Q3 Using NTO F.47 'Simple Number Line', place the frog on 7 and have the student read the numbers back to 0. Have the student repeat with their eyes closed. Continue to practise counting backwards, selecting different starting points. **Q**4 Revise recognition of numerals and words to 5 with BLM 20 'In the Pond'. Then have the student make their own number and word cards using BLM 8 'Blank Cards' and play matching games, e.g. 'Snap' or 'Go Fish'. Number and place value Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point (ACMNA001) Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) 🕰





Ten Frames

Resources: BLM 25 'Ten Frame Mat', counters, a set of cards made from BLM 26 'Ten Frame Cards', a number fan made from BLM 17 'Number Fan: Numerals', BLM 27 'Five Frame Mat', BLM 8 'Blank Cards'

- 1 Give the student a ten-frame mat made from BLM 25 'Ten Frame Mat' and some counters. Ask them to show 8, 3, 6, and 9 on their ten frame.
- 2 Randomly show the student cards made from BLM 26 'Ten Frame Cards' and have them show the matching numeral on a number fan made from BLM 17 'Number Fan: Numerals'.
- **3** Select two ten-frame cards made from BLM 26 'Ten Frame Cards', e.g. 4 and 6, and ask the student to identify which card shows more.
- 4 Show the student a ten-frame card made from BLM 26 'Ten Frame Cards', e.g. 5, and ask them to show a number that is less on their ten frame.

Number and place value

Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) Subitise small collections of objects (ACMNA003)

Foundation: Assessment Task Card F.10				
Unit 10	Ten Frames TARGETED ASSESSMENT			
Q1	For the student who is having difficulty, have them work with five frames. Give them a five-frame mat made from BLM 27 'Five Frame Mat', and have them make numbers up to 5. Show them different numbers on a ten frame and ask them what number they can see. When the student becomes familiar with numbers to 5, have them work with a ten-frame mat, making and reading numbers to 10.			
Q2	Use BLM 8 'Blank Cards' to make cards with numbers to 5 shown on a ten frame and numerals to 5. Have the student sort and match the cards. Have them play matching games, e.g. 'Memory'. Once they are familiar with numbers to 5, gradually introduce numbers to 10.			
Q3	Have the student show a number on a ten-frame mat made from BLM 25 'Ten Frame Mat', e.g. 4, and then have them put more counters on the mat. Ask what number more than 4 they have made. Repeat for other numbers. For further practice identifying numbers with more counters, have them play 'Ten on the Mat'.			
Q4	Repeat the suggestions for Q3 with the student taking away counters to explore the concept of less.			
Num Conne Subitis	ber and place value ect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) 📀 se small collections of objects (ACMNA003) ೂ			





Counting and Comparing Groups

Resources: counters, a set of cards made from BLM 10 'Number Match 1' and BLM 11 'Number Match 2', a number fan made from BLM 19 'Number Fan: Ten Frame', NTO F.7 'Can You Count?'

- 1 Show the student groups of counters, e.g. 7, 2, 5, 3, and ask them how many counters they can see.
- 2 Present a number represented on a ten frame on a number fan made from BLM 19 'Number Fan: Ten Frame', and have the student find the card from a set of cards made from BLM 10 'Number Match 1' and BLM 11 'Number Match 2' showing a group of objects of the same number.
- **3** Show two cards from BLM 10 'Number Match 1' and BLM 11 'Number Match 2' that show groups of objects, and ask the student which group has less.
- 4 Show two cards from BLM 10 'Number Match 1' and BLM 11 'Number Match 2' that show groups of objects, and ask the student which group has more.
- 5 Present a number represented on a ten frame on a number fan, and have the student find all of the cards from BLM 10 'Number Match 1' and BLM 11 'Number Match 2' that show groups that are more.

Number and place value

Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) Compare, order and make correspondences between collections, initially to 20, and explain reasoning (ACMNA289)

Foundation: Assessment Task Card 11 TARGETED ASSESSMENT Counting and Comparing Groups Q1 Continue to provide experiences whereby the student needs to count out groups of objects in daily classroom activities, e.g. 'Get me 7 pencils.' Also present groups of familiar objects, e.g. 5 books, and ask the student how many they can see. Q2 Use everyday classroom experiences for the student to count out groups of objects that are the same, e.g. handing sheets of paper to a student and asking: 'Are there enough for each student at your table?' Q3-4 Have the student compare groups of objects to decide who has more, e.g. two students grab a handful of pencils each and say who has more and who has less. Using NTO F.7 'Can You Count?' to generate a number, have the student show on a number fan made Q5 from BLM 19 'Number Fan: Ten Frame' ten frames that have more. Continue generating groups of objects using the NTO, and have the student show all of the numbers that are more or less on their number fan. Number and place value Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) 👁 Compare, order and make correspondences between collections, initially to 20, and explain reasoning (ACMNA289) 🚱





2D Shapes

Resources: attribute blocks, Shapes, Shapes, Shapes by Tana Hoban (HarperCollins, 1986)

- 1 Give the student a set of attribute blocks all the same colour, and ask them to sort them into groups. Ask the student how they sorted them into the groups.
- 2 Point to the circle and ask the student what the shape is. Repeat for rectangle, triangle and square.
- **3** Point to the rectangle and ask the student if they can find any of this shape in the classroom.

Shape

Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment (ACMMG009) 🖉



Foundation: Assessment Task Card F.13				
Unit 13	Ordinal Numbers Resources: sheets of paper, coloured pencils, a set of cards made from BLM 34 'Ordinal Numbers', BLM 35 'Medals'			
1	Have the student draw 10 circles in a row or give them a prepared copy. Ask them to point to the first circle and colour it yellow. Have them colour the third circle blue, fifth circle blue, tenth circle blue, eighth circle yellow, fourth circle yellow.			
2	Ask the student to point to the second circle and write '2nd' in the circle. Ask them to label the ordinal numbers on the remaining uncoloured circles.			
3	Give the student a set of cards made from BLM 34 'Ordinal Numbers' and have them match the ordinal numbers to their work. Ask them to find the cards for 3rd, 5th, 1st, 7th and 2nd.			
Number and place value Compare, order and make correspondences between collections, initially to 20, and explain reasoning (ACMNA289)				

Foundation: Assessment Task Card F.13				
Unit 13	Ordinal Numbers TARGETED ASSESSMENT			
Q1	Look for opportunities in the classroom to revise ordinal number, e.g. who is third in line, get the third book in the pile, who is fifth on the roll.			
Q2	When holding any competitions in class, use medals made from BLM 35 'Medals' to award to the first five students as a way of exposing students to the written form of ordinal terms.			
Q3	Play matching games, e.g. 'Memory', with cards made from BLM 34 'Ordinal Numbers' but restrict to the first five terms. As the student becomes familiar with the first five terms, gradually introduce other terms.			
Number and place value Compare, order and make correspondences between collections, initially to 20, and explain reasoning (ACMNA289) 🐠				





Patterns

Resources: pattern blocks, NTO F.41 'Shapes: Finish the Pattern', art materials, musical instruments or counters, LO: *L1056 'Monster choir'*

Show the student movement patterns and ask them to copy the pattern, e.g. clap hands twice, shake hands twice, clap hands twice, shake hands twice clap hands three times, tap knees twice, clap hands three times, tap knees twice
 Use pattern blocks to make patterns and have the student continue the pattern by asking, 'What comes next?' Patterns could be: triangle, square, triangle, square hexagon, triangle, hexagon
 Give the student some blocks and have them create a pattern. Ask them to describe their pattern and say what will come next.

Patterns and algebra Sort and classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns with objects and drawings (ACMNA005)

Fo	Foundation: Assessment Task Card				
Unit 14	Patterns TARGETED ASSESSMENT				
Q1	Provide opportunities during cross-curricular activities for the student to copy movement and sound patterns. Demonstrate a pattern and ask the student to identify the repeating element that makes it a pattern.				
Q2	Have the student practise continuing patterns using NTO F.41 'Shapes: Finish the Pattern'.				
Q3	Provide experiences for the student using art materials, musical instruments, movements, counters or blocks and LO: <i>L1056 'Monster choir'</i> to create their own patterns. As they create patterns, ask them to identify the repeating elements.				
Patte Sort a with o	rns and algebra nd classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns bjects and drawings (ACMNA005) 🕼				



15 Time

Resources: cards with the words 'yesterday', 'today', 'tomorrow' on them, sheet of paper folded into four, coloured pencils, books from the 'A Student's Day' series, NTO F.42 'Time Sequence'

- 1 Hold up the card for 'yesterday' and tell the student what it says. Ask them to tell you things they did yesterday at school. Hold up the card for 'today' and ask them to tell you something they did today before school. Hold up the card for 'tomorrow' and ask the student to tell you something they know will happen tomorrow.
- 2 Provide the student with a sheet of paper folded into four. Ask them to draw an activity they can only do at night. Then ask them to draw a picture of something they can only do during the day. Discuss the pictures with the student, and have them explain why each thing can only be done during the day or night. In the next space on the paper, have them draw something they only do in the morning and then something that they only do in the afternoon. Discuss these pictures with the student to understand their reasoning.
- **3** Present NTO F.42 'Time Sequence' and have the student explain the first picture. Ask them which picture they think will come next and explain why. Have them sequence the remaining pictures.

Using units of measurement Compare and order the duration of events using the everyday language of time (ACMMG007)

Foundation: Assessment Task Card F.15				
Unit 15	Time TARGETED ASSESSMENT			
Q1	Revisit the concepts today, yesterday and tomorrow with the student during regular classroom activities, e.g. diary writing on Monday morning, revising concepts from yesterday's maths lesson, discussing events that will happen throughout the day and week.			
Q2	Read books in the 'A Student's Day' series and discuss the events that happen and when they happen. Discuss with the student why these things happen at those particular times throughout the student's day. Have them discuss the events of the previous day at school and when things happen during the day.			
Q3	Have the student practise sequencing things that happen over time using NTO F.42 'Time Sequence'. Use photos taken from school events, e.g. assemblies, concerts, growing seeds, construction on school sites, and have them sequence the photos.			
Using units of measurement Compare and order the duration of events using the everyday language of time (ACMMG007)				





Understanding Numbers to 10

Resources: counters, BLM 25 'Ten Frame Mat', BLM 37 'Blank Ten Frames: Small', coloured pencils, NTO F.14 'Farmyard', Unifix blocks, animal counters, *Nelson Maths Building Mental Strategies Big Book 1*, teddy counters and a teddy bus

- **1** Pose the problem: 'I had a group of 6 counters, some were red and some were blue. Show me what the group of counters could look like.'
- 2 Ask, 'Can you show me other ways to make a group of 6 counters?'
- **3** Provide the student with a ten-frame mat made from BLM 25 'Ten Frame Mat' and two differentcoloured counters. Ask, 'Can you show 10? Can you show me a different way to make 10?'
- 4 Give the student a copy of BLM 37 'Blank Ten Frames: Small', and ask them to draw all the different ways that 10 can be made.

Number and place value Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002)







2

Beginning Addition

Resources: counters, NTO F.14 'Farmyard', a set of dominoes made from BLM 39 'Dominoes', The Very Hungry Caterpillar by Eric Carle (Scholastic, 1987), counters, NTO F.44 'Dominoes: Free Play'

- **1** Provide the student with counters and have them:
 - make a group of 5 and a group of 3 and ask, 'How many altogether?'
 - make a group of 2 and a group of 4 and ask, 'How many altogether?'
 - make a group of 7 and a group of 1 and ask, 'How many altogether?'
 - Present NTO F.14 'Farmyard' and ask:

'There were 3 muddy pigs and 6 clean pigs. How many pigs altogether?'

'There were 4 lettuces and 5 carrots. How many vegetable plants altogether?'

- 'There were 3 grey horses and 5 brown horses. How many horses altogether?'
- **3** Select a domino from a set of dominoes made from BLM 39 'Dominoes', point to one side and ask, 'How many dots?' Point to the other side and ask, 'How many dots?' Then ask, 'How many dots altogether?' Repeat for other dominoes.
- 4 Place the set of dominoes face-up and ask, 'Can you find a domino that has seven dots altogether? Can you find any more?'

Number and place value Represent practical situations to model addition and sharing (ACMNA004)







More About Shapes and Objects

Resources: a range of 3D objects, e.g. balls, boxes, dice, cones, cartons and blocks, playdough, plastic knives, rolling pins or pieces of dowel, a bag, *Cubes, Cones, Cylinders and Spheres* by Tana Hoban (HarperCollins, 2000)

- 1 Provide a collection of 3D objects and ask the student to sort into groups. When they have finished sorting, ask them how they decided on the groups. If they did not sort according to shape, ask them if they can sort the objects in a different way.
- 2 Provide the student with playdough, plastic knives and rolling pins, and ask them to make a sphere and a cube. Ask, 'Are there any other shapes you know that you can make?'
- **3** Place small 3D objects, e.g. sphere, cube, cylinder and cone, in a bag. Have the student put their hand in the bag, feel for an object and name it. Ask, 'How did you know it was that object? What could we use that object for?' Continue for remaining objects.

Shape

Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment (ACMMG009) 🔎







More About Addition

Resources: NTO F.34 'Show a Number', a five-frame mat made from BLM 27 'Five Frame Mat', counters, BLM 44 'Number Line', BLM 50 'Number Line Bingo', NTO F.46 'Doubles Song', BLM 43 'Doubles on Board', NTO F.46 'Doubles Song'

- 1 Present NTO F.34 'Show a Number' displaying one ten frame. Show 6 and ask, 'If I added 2 more, how many would there be?' Show 3 and ask, 'If I added 4 more, how many would there be?' Show 1 and ask, 'If I added 4 more, how many would there be?' Show 2 and ask, 'If I added 6 more, how many would there be?'
- **2** Ask, 'What is 1 more than 7? What is 1 more than 2? What is 1 more than 5? What is 1 more than 8?'
- **3** Present NTO F.34 'Show a Number' and:
 - display 2 on a ten frame and ask, 'What is double 2?'
 - display 5 on a ten frame and ask, 'What is double 5?'
 - display 3 on a ten frame and ask, 'What is double 3?'

Number and place value Represent practical situations to model addition and sharing (ACMNA004)

Foundation: Assessment Task Card F.19				
Unit 19	More About Addition	TARGETED ASSESSMENT		
Q1	Have the student use a five-frame mat made from BLM 27 'Five Fran numbers and visualise 1 or 2 more. When the student can visualise u use a ten frame.	ne Mat' and counters to make Ising a five frame, have them		
Q2	Enlarge a copy of BLM 44 'Number Line' to make large number lines particular numbers, and ask them what the number will be if they jurn check by jumping one more. Have the student play 'Number Line Bir Bingo', but restrict to the numbers to 10 and only ask them to identif	. Have the student stand on np one more. Then have them ngo' using BLM 50 'Number Line y numbers that are one more.		
Q3	To revise doubles, have the student sing the 'Doubles Song' on NTO use their fingers to show the doubles as they sing the song. Then have to play 'Doubles on Board' on BLM 43 'Doubles on Board'.	F.46 'Doubles Song'. Have them ve the student work with a partner		
Number and place value Represent practical situations to model addition and sharing (ACMNA004)				





Moving Ahead with Addition

Resources: NTO F.44 'Dominoes: Free Play', NTO F.47 'Simple Number Line', a cup, counters, two dice, sheets of paper, BLM 44 'Number Line', two numeral dice

- 1 Present a domino using NTO F.44 'Dominoes: Free Play' and ask the student to make addition sentences about the dots they can see. If they only write one addition sentence, ask, 'Is there another addition sentence you can write?'
- 2 Present the following number sentences to the student to complete:
 - 3 and 4 make 7 so 4 and 3 make ____
 - 5 and 4 make 9 so 4 and 5 make ____
- **3** Present NTO F.47 'Simple Number Line' and ask the student to show you how to solve the following problems using a number line:
 - 6 and 3
 - 2 and 5
- 4 Turn a cup upside down so that you cannot see into it. Place two counters next to the cup and ask, 'There are 4 counters in the cup and 2 more next to the cup, so how many altogether?' Place five counters next to the cup and ask, 'There are 2 counters in the cup and 5 more next to the cup, so how many altogether?'

Number and place value Represent practical situations to model addition and sharing (ACMNA004)

Foundation: Assessment Task Card 20 Moving Ahead with Addition TARGETED ASSESSMENT Q1-2 Have the student practise adding by rolling two dice and asking them how many dots altogether. Then swap the dice over and ask, 'How many altogether?' Have the students record the addition sentences. Q3 Use an enlarged copy of BLM 44 'Number Line' to make a large number line that the student can place themselves on. Use two numeral dice to randomly generate two numbers, e.g. 3 and 2, for the student to add together. Have the student read the first number and, starting at 0, take three steps to land on 3. Then ask them to read the second number and take two more steps. Ask them what number they landed on. Then record for them: 'I took three steps and two steps and I landed on 5 so 3 and 2 are 5'. Once the student has become familiar with the idea of using the number line to add numbers, have them use NTO F.47 'Simple Number Line' and two dice with numerals. Q4 To practise counting on, have the student work with a partner who counts four counters and holds them in their fist. The first student rolls a dice, counts out that many counters and says, 'I have 3 counters in my hand and you have 4 more, that makes 7 counters altogether.' Students continue alternating roles. Number and place value Represent practical situations to model addition and sharing (ACMNA004)

© 2012 Cengage Learning Pty Limited. This page from Nelson Maths: Australian Curriculum Teacher's Resource Foundation may photocopied for educational use within the purchasing institution.

Foundation: Assessment Task Card	
----------------------------------	--





Mass

Resources: an assortment of classroom objects, e.g. a selection of books, pencils, scissors, rulers, counters and blocks, full and empty containers, balls

- **1** Provide an assortment of classroom objects, and ask the student to find an object that is heavy and an object that is light. Discuss with them how they made their selection.
- 2 Give the student a familiar object, e.g. their home reading book, and ask them to find something that is heavier. Once they have selected an object, ask, 'How do you know that it is heavier?'
- **3** Provide a group of objects that vary in mass, e.g. some books, and have the student order from heaviest to lightest. Ask, 'How did you decide which was the heaviest? How did you decide the next heaviest?'

Using units of measurement Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language (ACMMG006)

Foundation: Assessment Task Card F.21				
Unit 21	Mass TARGETED ASSESSMENT			
Q1	Have the student compare similar items that are very different in mass, e.g. a light paperback copy of a book and a hardcover book, full and empty containers, or balls such as pingpong balls and golf balls. Have the student pick up each of the two items and decide which could be labelled heavy and which could be labelled light.			
Q2	Have the student use a personal belonging, e.g. a packet of pencils or scissors, and find different objects in the classroom environment to heft and compare to their personal item.			
Q3	As the student becomes more proficient at comparing two items, have them compare three items, and by hefting, identify the heaviest and the lightest and check that the remaining item is in between the heaviest and the lightest.			
Using units of measurement Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language (ACMMG006)				





Numbers Beyond 10

Resources: a set of number tiles made from BLM 46 'Number Tiles 0–10' and BLM 47 'Number Tiles 11–20', sheet of paper, NTO F.4 'Numbers', a copy of BLM 47 'Number Tiles 11–20', coloured pencils, NTO F.47 'Simple Number Line'

- 1 Randomly show the set of number tiles made from BLM 46 'Number Tiles 0–10' and BLM 47 'Number Tiles 11–20', and ask the student to read the numbers.
- 2 Say the following numbers and have the student write them down:

18	16	19	14	17	11	12	15	13
10	10	10					10	

- **3** Ask the student to count from 1 to 20.
- 4 Give the student the set of number tiles made from BLM 46 'Number Tiles 0–10' and BLM 47 'Number Tiles 11–20', and have them put them into the correct order.

Number and place value

Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point (ACMNA001)







Counting Again

Resources: a set of number tiles made from BLM 46 'Number Tiles 0–10' and BLM 47 'Number Tiles 11–20', counters, a bead frame, pencils, stones, small whiteboards or sheets of paper

1 Show a set of number tiles made from BLM 46 'Number Tiles 0–10' and BLM 47 'Number Tiles 11–20' to the student and have them count forwards from:

8 16 12 18

- 2 Ask the student to count backwards from 15 as far as they can go.
- **3** Have the student get a handful of counters and ask them to count how many they have.
- 4 Ask the student to count out a group of counters that is more than the handful of counters they have.
- 5 Show the student a group of 13 counters and ask them to make a group that is less. Ask, 'How do you know that it is less?'

Number and place value

Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point (ACMNA001)

Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) Compare, order and make correspondences between collections, initially to 20, and explain reasoning (ACMNA289) Co



Counting Again

23

TARGETED ASSESSMENT

- **Q1** Have the student practise counting on from different starting points by using a bead frame and counting beads to specific numbers, e.g. 1, 2, 3, 4, 5. Stop and ask the student how many beads there are and then have them continue counting from 5.
- Q2 Have the student practise counting backwards using the visual support of the number tiles made from BLM 46 'Number Tiles 0–10' and BLM 47 'Numbers Tiles 11–20' in a row. Then gradually turn over the number tiles, asking the student to visualise the number sequence. Once the student has memorised counting backwards, have them count back from 2, then 3, then 4 and so on, until they are able to count back from any number to 20.
- **Q3** Give the student practice counting collections of counters, pencils, stones, students and so on, making sure that initially they touch each item in the group and that they understand that the last number they say is the size of the group.
- Q4 Have the student practise counting out a specific-sized group of counters or objects and write the number on a small whiteboard or sheet of paper. Then ask them to put one **more**, stressing the word more, in the group. Have the student then count how many are in the group now and record that on their whiteboard. Ask them to form a sentence saying which number is more than the other number. Allow the student to explore further which numbers are more than a given number.
- **Q5** Have the student practise counting out groups of counters and laying them side by side. Then ask the student to count out a second group of counters that is less, having them place that group next to the first. Ask the student to look at the groups and decide which has less. Have the student make another group that is less than the original group of counters and have the student verbalise their findings.

Number and place value

Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point (ACMNA001)

Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) Compare, order and make correspondences between collections, initially to 20, and explain reasoning (ACMNA289)





More About Numbers to 20

Resources: NTO F.35 'Ten Frames: Make a Number', NTO F.34 'Show a Number', BLM 37 'Blank Ten Frames: Small', BLM 8 'Blank Cards', NTO F.50 'Representation Matching'

- 1 Randomly show the student numbers represented on ten frames using NTO F.35 'Ten Frames: Make a Number' and ask them what the number is.
- 2 Using NTO F.34 'Show a Number' or BLM 37 'Blank Ten Frames: Small', ask the student to model:

12	16	19	11	13

3 Have the student write the words for:

13	15	11	16	14	12

4 Tell the student that numbers can be represented in different ways and have them show how they can represent 12. Different numbers can be given to different students.

Number and place value

Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (ACMNA002) Compare, order and make correspondences between collections, initially to 20, and explain reasoning (ACMNA289)





Unit	
25	

Our Class

Resources: NTO F.51 'Graphing: Yes or No'

1 Ask the student what yes/no question	n they could ask their friends to find out what they like to do.
--	--

- 2 Show NTO F.51 'Graphing: Yes or No' displaying a YES column with 10 squares and a NO column with two squares. Ask the student what the question could be.
- **3** After typing a suitable question into the graph, e.g. 'Do you like swimming?', ask, 'How many students like swimming?
- 4 Ask the student to tell any other information that the graph is showing.

Data representation and interpretation Answer yes/no questions to collect information (ACMSP011)

Foundation: Assessment Task Card				
Unit 25	Our Class TARGETED ASSESSMENT			
Q1 Q2	Continue to work with the student to brainstorm yes/no questions they could ask the class. Use NTO F.51 'Graphing: Yes or No' when exploring cross-curricular activities, e.g. answering and graphing results of questions such as 'Is it made of plastic? Does it need food? Do you have a grandmother?'			
Q3–4	When using simple displays like those made using NTO F.51 'Graphing: Yes or No', encourage the student to tally how many in each column and compare. Have them identify the most frequent response and what that may mean.			
Data representation and interpretation Answer yes/no questions to collect information (ACMSP011)				



 How Much Does It Hold? Resources: rice, sand, water or counters, a selection of containers, tub of water
 Provide the student with rice, sand, water or counters and some containers. Ask them to show you a container that is full and one that is empty.
 Have the student select two containers. Ask, 'Which container holds more? How did you decide?'
 Ask the student to prove which container holds more.



Fou	Foundation: Assessment Task Card			
Unit 27	Subtraction Resources: counters, pencils, NTO F.14 'Farmyard', NTO F.33 'Ten in the Bed'			
1	 Provide counters for the student to complete the following problems: 9 take away 4 6 take away 2 7 take away 5 			
2	 Provide the student with pencils, and ask: 'If I have 8 pencils and I give 4 to my friend, how many will I have left?' 'If I have 5 pencils and I give 2 to my friend, how many will I have left?' 'If I have 10 pencils and I give 8 to my friend, how many will I have left?' 			
3	Present NTO F.14 'Farmyard' and tell a subtraction story to the student, e.g. 'There were 6 apples on the tree and 3 were green. So that left 3 red apples.' Ask the student to look at the NTO and tell a subtraction story.			
Numb Repres	per and place value sent practical situations to model addition and sharing (ACMNA004) 📀			

Foundation: Assessment Task Card				
Unit 27	Subtraction TARGETED ASSESSMENT			
Q1	Use smaller numbers to begin with. Provide the student with counters, have them count out groups up to 5 and then ask them to take away one or two counters. After they become proficient with this procedure, have them first visualise the counters having gone, then check their prediction by taking the counters away.			
Q2	Have the student continue working with smaller amounts. Have them count out some counters, share into two amounts and record their findings, e.g. 'I had 6 and shared into 4 and 2.'			
Q3	Use NTO F.33 'Ten in the Bed' as a focus of discussion and to create subtraction stories.			
Number and place value Represent practical situations to model addition and sharing (ACMNA004)				





More About Subtraction

Resources: NTO F.34 'Show a Number', NTO F.47 'Simple Number Line', a ten-frame mat made from BLM 25 'Ten Frame Mat', counters, BLM 27 'Five Frame Mat', BLM 44 'Number Line', teddy counters and a teddy bus

- 1 Present NTO F.34 'Show a Number' and show the student:
 - 8 on the ten frame and ask, 'If I take away 3 from 8, how many will be left?'
 - 6 on the ten frame and ask, 'If I take away 4 from 6, how many will be left?'
 - 7 on the ten frame and ask, 'If I take away 2 from 7, how many will be left?'
- 2 Present NTO F.47 'Simple Number Line' displaying one number line. Ask the student to use the number line to work out the following problems:
 - 9 take away 4
 - 5 take away 4
 - 7 take away 4
- 3 Give the student a ten-frame mat made from BLM 25 'Ten Frame Mat' and some counters. Have them show:
 - 6 and ask, 'If I take 6 away from 10, how many will be left?'
 - 7 and ask, 'If I take 7 away from 10, how many will be left?'
 - 2 and ask, 'If I take 2 away from 10, how many will be left?'
- 4 Have the student write a tens fact they know and then write a subtraction problem they could solve using their tens fact.

Number and place value

Represent practical situations to model addition and sharing (ACMNA004)



Foundation: Assessment Task Card						
Unit 29	More About Time Resources: NTO F.57 'Clock', a logi clock, a range of clocks and watches, sheets of paper, coloured pencils					
1 2 3	Have the student draw a clock. Ask, 'Why are the hands of the clock different sizes?' Present NTO F.57 'Clock', and have the student read and write the times on the clock showing:					
4	9 o'clock On a logi cloc 6 o'clock	1 o'clock k, have the stude 10 o'clock	7 o'clock ent show: 2 o'clock	4 o'clock 8 o'clock		
Using Comp Conne	units of measu are and order the act days of the we	rement duration of events ek to familiar events	using the everyda s and actions (ACI	y language of time (ACMMG007) 📀 MMG008) 🐼		

Foundation: Assessment Task Card F.29					
Unit 29	More About Time TARGETED ASSESSMENT				
Q1	Provide the student with a range of clocks and watches, and have them draw them so they can understand that the numbers on all clock faces are the same and the hands are different sizes but all radiate from the centre of the clock face.				
Q2	Use a logi clock to explore how the hands of a clock move. Draw the student's attention to how the small hand moves slowly and between consecutive numbers, while the long hand travels all the way around the clock face.				
Q3	Show the student different times using NTO F.57 'Clock'. Ask them to identify where the long (minute) hand and the short (hour) hand are pointing.				
Q4	Have the student practise showing different times on a logi clock, making sure they have the long (minute) hand pointing to the 12 and the short (hour) hand pointing to the hour.				
Using Units of Measurement Compare and order the duration of events using the everyday language of time (ACMMG007) (AC Connect days of the week to familiar events and actions (ACMMG008) (AC					





Addition and Subtraction

Resources: pencils, NTO F.34 'Show a Number', dice, a five-frame mat made from BLM 27 'Five Frame Mat', a ten-frame mat made from BLM 25 'Ten Frame Mat', a number line made from BLM 44 'Number Line', counters, *Nelson Maths Building Mental Strategies Big Book 1*, interlocking cubes

1 Show the student:

- 3 pencils and ask, 'I had 7 pencils and I now have 3, so how many did I lose?'
- 5 pencils and ask, 'I had 8 pencils and I now have 5, so how many did I lose?'
- 2 pencils and ask, 'I had 9 pencils and I now have 2, so how many did I lose?'
- 2 Use NTO F.34 'Show a Number' and show 5. Ask the student what number they can see, and then ask, 'I have 5. What do I need to do to show 7?'
- **3** Use NTO F.34 and show 6. Ask the student what number they can see, and then ask, 'I have 6. What do I need to do to show 3?'
- 4 Have the student write down the numbers from 0 to 12. Have them roll two dice, and ask them what numbers they can cross off if they are allowed to add or subtract the numbers on the dice.
- 5 Tell the student you were playing a game and crossed off 5. Ask, 'What could I have thrown on a dice? Can you think of any other combinations?'

Number and place value Represent practical situations to model addition and sharing (ACMNA004)

