Musical Maths Activity Songs

for Foundation Stage

by Brendon Renwick

Teachers' Resource Booklet

This is a sample of pages from the document of teaching notes, full song lyrics and picture flash cards intended for use by teachers and teaching assistants using our double CD resource: Musical Maths Activity Songs *(MFS 036).* This narrated musical resource of 16 original songs has been written to help support ***Foundation Stage*** children's learning & development in ***Mathematics***, as outlined in the ***Statutory Framework for the Early Years Foundation Stage*** document (Department for Education © Crown Copyright 2012). The resource offers an engaging range of tried and tested songs & activities which explore ***Numbers*** and ***Shape, Space & Measure***, thus giving a new dimension to teachers' ongoing work. It is hoped that this resource will also be used as material for children's learning & development in the areas of ***Communication & Language, Physical Development*** and ***Expressive Arts*** (i.e. music, movement, role play). Musical Maths Activity Songs is written and composed by **Dr Brendon Renwick** - author of Songs for Early Years Letters and Sounds - and a qualified teacher, music education consultant and Foundation Stage music specialist working in schools and nurseries throughout the Northeast of England.

IMPORTANT NOTICE

Only purchasers of the *Musical Maths Activity Songs* compact disc recordings (MFS 036) are permitted to access this PDF document, and these institutions / individuals are listed on our 'register of purchasers'. Purchasers may freely copy and print this document, but the document must not be altered or passed to any non-purchasing institutions, individuals or third parties.

music for schools

Three Crabs Playing On A Sandy Beach

Moving on, this song/activity requires children to recognise groups of numbers between 1 and 10. It can be extended to include groups of numbers between 1 and 20 if desired.

Relates to:

NUMBERS
- counting reliably (1 to 3)
- placing numbers in order
- identifying 'one less' than a given number
- counting back

SHAPE, SPACE & MEASURE
- using everyday language to talk about size, weight, position, distance

Also...

Communication & Language (listening and attention)
- listening to stories, accurately anticipating key events

Physical Development (moving and handling)
- showing good control and co-ordination in small movements (using fingers)

Expressive Arts and Design (exploring and using media and materials)
- singing songs
- making music (using cymbal, triangle)

Teaching notes:

- Use fingers to represent 'how many' crabs.
- Add the effect of the 'crashing wave' by striking a triangle or cymbal. Ensure that children are shown how to handle and strike their instrument for best effect.
- Use the PICTURE CARDS supplied to help prompt 'how many' are left with each verse.
- Use soft toy crabs to follow and help dramatise the song.
- Make crab hats/headbands to help involve children as crabs.
- Use the crabs to facilitate discussion about big, medium, small.
- Use the crabs to help discuss where on the shore each crab was 'washed away'. This can help discussion about position and distance.
- Encourage children to sing along with chorus (boo, hoo, boo, hoo / ha, he, ha, he - etc.) to develop their rhyming language.

Three Crabs Playing On A Sandy Beach

VERSE 1
Three crabs playing on a sand-y beach,
safely away from the water's edge.
Along came a wave that crashed and sprayed
and washed the daddy crab away.

Boo hoo boo hoo boo hoo HOO,
then there were only two.
Boo hoo boo hoo boo hoo HOO,
then there were only two.

VERSE 2
Two crabs playing on a sandy beach,
safely away from the water's edge.
Along came a wave that crashed and sprayed
and washed the mummy crab away.

Boo hoo boo hoo boo hoo HOO,
then there was only one.
Boo hoo boo hoo boo hoo HOO,
then there was on-ly one.

VERSE 3
One crab playing on a sandy beach,
safely away from the water's edge.
A-long came a wave that crashed and sprayed
and washed the baby crab away.

Boo hoo boo hoo boo hoo HOO,
then all the crabs were gone.
Boo hoo boo hoo boo hoo HOO,
then all the crabs were gone.

VERSE 4
NO crabs playing on a sandy beach,
all had been swept from the water's edge.
Along came a wave that crashed and sprayed
and washed the crabs back a-gain.

Ha, he, ha, he, ha, he HEE,
then they were back to three.
Ha, he, ha, he, ha, he HEE,
then they were back to three,
then they were back to three.

CD 1 track 7

Molly Measles

Moving on, this song/activity requires children to recognise groups of numbers between 1 and 10. It can be extended to include groups of numbers between 1 and 20 if desired.

Relates to:

NUMBERS
- counting reliably (1 to 10)
- counting on
- solving problems, including doubling, halving and sharing
- placing numbers in order
- identifying 'one more' and 'one less' than a given number
- counting back

SHAPE, SPACE & MEASURE
- comparing quantities and objects to solve problems
- recognising, creating and describing patterns

Also...

Communication & Language (listening and attention)
- responding to what they hear with relevant comments, questions or actions.

Physical Development (moving and handling)
- showing good control and co-ordination in small movements (using fingers)

Understanding the World (people & communities)
- knowing that other children don't always enjoy the same things, and are sensitive to this.

Expressive Arts and Design (exploring and using media and materials)
- singing songs

Molly Measles

VERSE 1
Poor Molly Measles is covered in spots.
Big ones and small ones... lots and lots.
The doctor said that
they'll come and they'll go.
(Molly - spoken)
"Come and go ! Oh no !"

So look in the mirror, Molly Measles.
Show us how many you've got !
(spoken - showing picture card)
"How many has she got ?"

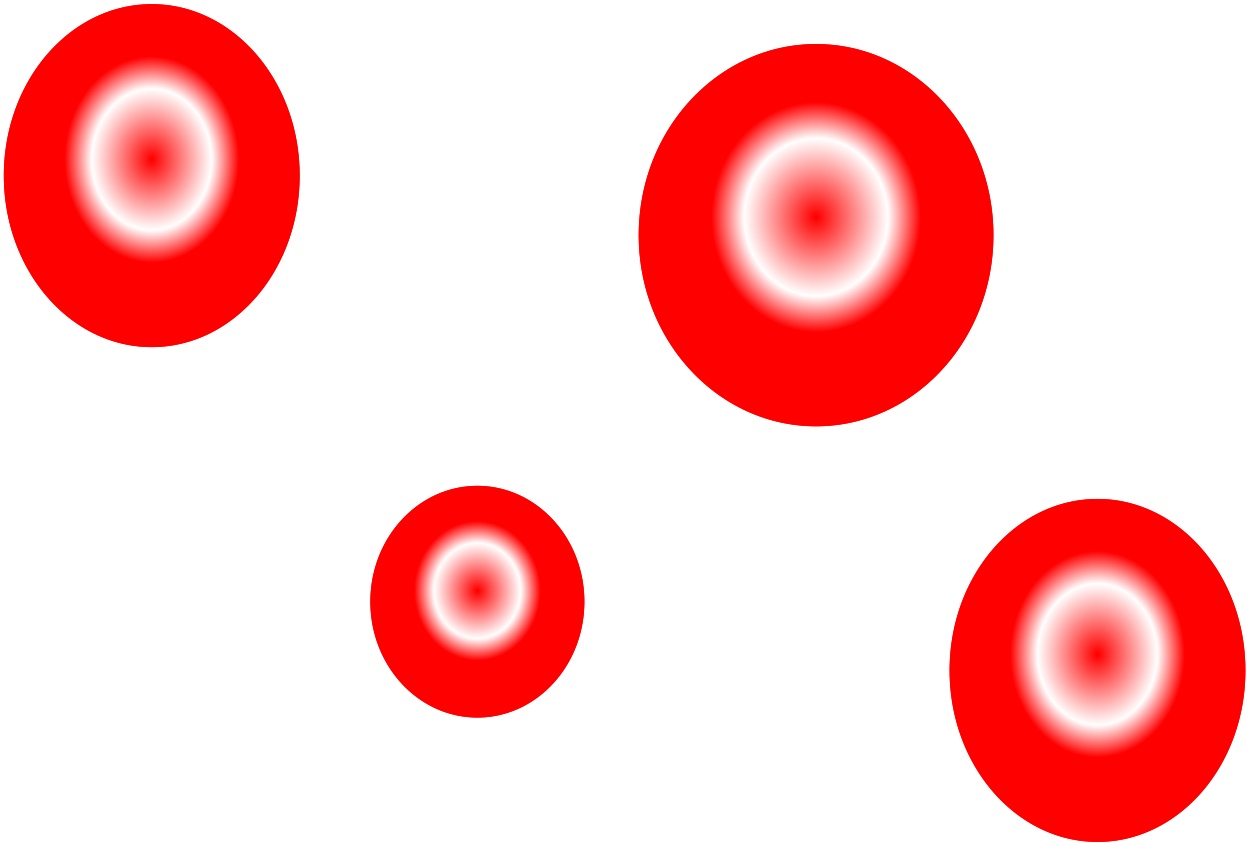
VERSE 2
(as above, but ending with the question...)
"How many has she got now ?"

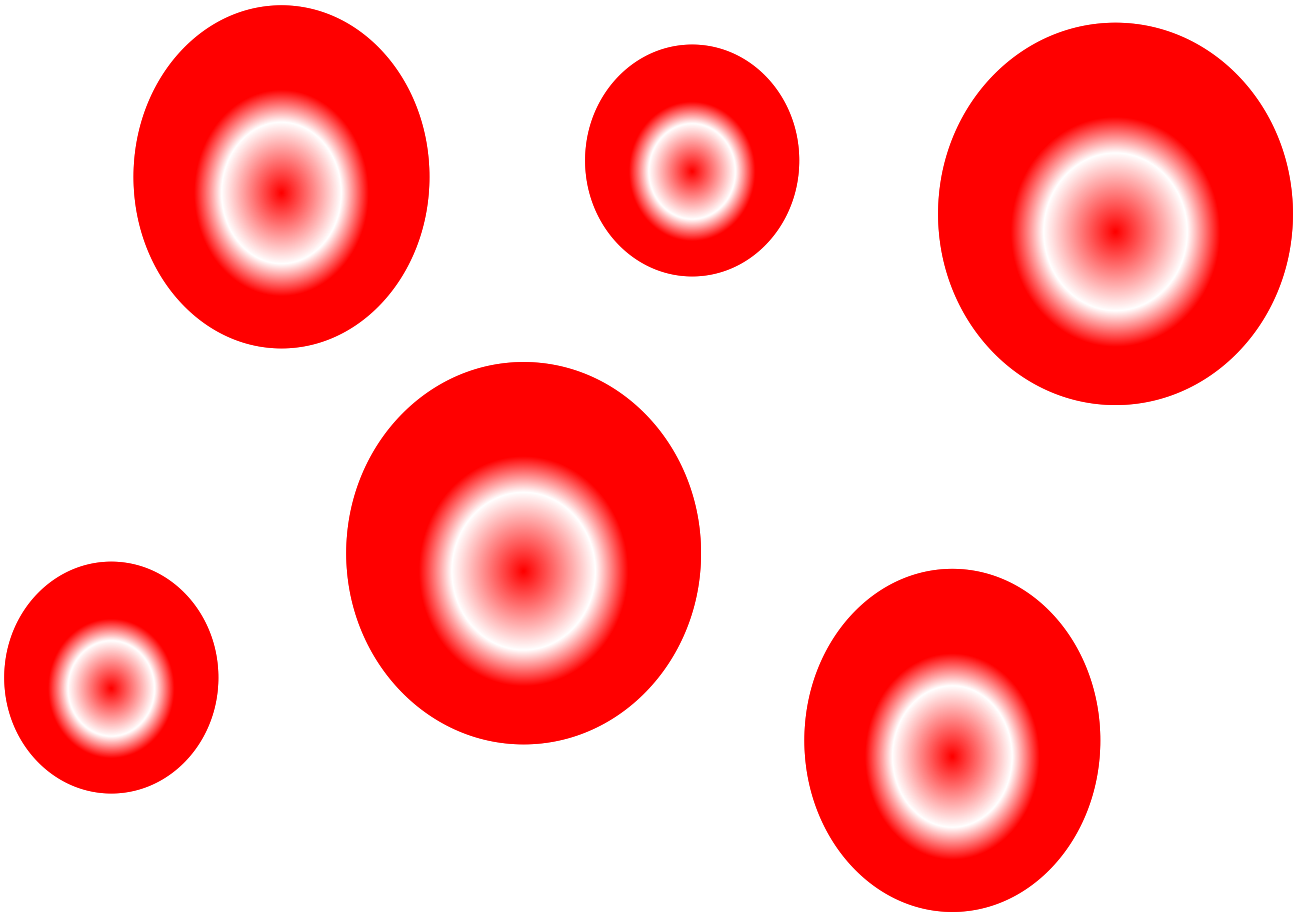
VERSE 3
(as above, but ending with the question...)
"How many has she got ?"

VERSE 4
(as above, but ending with the question...)
"And how many has she got now ?"

Teaching notes:

- Use the PICTURE CARDS supplied to help prompt 'how many spots' Molly has each time, or use your own picture cards of spots to explore different groups of numbers, extending up to 20.
- Before the song, spend time looking at familiar groups/patterns - e.g. 4 spots forming a square, 3 - a triangle, 6 - like eggs in an egg box, 10 - arranged as a pyramid (with 4 along the bottom), 15 - like a larger pyramid (with 5 along the bottom).
- Introduce randomly scattered spots to solve as a counting up problem.
- After the song explore taking away 1 or 2 spots from a larger number to see if children can problem solve the quantity without having to recount the group.
- Using your own picture cards with larger groups of spots, ask "'Which picture has the most spots ?" "Does this picture have more spots than this picture ?" "Which has the fewest spots ?" - etc.
- Use a 'box of spots' (buttons ?) instead of picture cards to scatter on the floor, then count up.
- Use volunteers with spots painted on their faces (or stick-on dots) to feature during the song.
- Use a 'Molly Measles' puppet to say "*Come and go, oh no !*" to encourage children to imitate her rhyming language.
- Introduce written numerals if appropriate for your children.





CD 1 track 13

I Can Hear A Number - version 1

This activity song requires children to listen attentively as they count up sounds that they cannot see, in their head. It features a range of common percussive sounds and is later developed in version 2 for teachers and children to take part.

Relates to:

NUMBERS
- counting reliably (1 to 10)
- counting on
- recognising, creating and describing patterns (when using the instruments)

SHAPE, SPACE & MEASURE
- recognising, creating and describing patterns
- exploring characteristics of everyday objects and shapes

Also...

Communication & Language (listening and attention)
- listening attentively in a range of situations.
- responding to what they hear with relevant comments, questions or actions.

Physical Development (moving and handling)
- handling equipment (instruments) effectively.

Expressive Arts and Design (exploring and using media and materials)
- making music (i.e. using instruments)

Teaching notes:

- Before the song, encourage children to close their eyes which will help with their attentive listening during this game of 'hide and listen'. Teachers or children strike various percussion instruments out of sight for others to count up how many strikes.
- Demonstrate good instrument handling and encourage clear and separated sounds from instruments.
- Use the PICTURE CARDS supplied to help cue children when they listen out for each sound.
- Introduce numeral flash cards for children to choose from as they respond to 'how many ?'.

I Can Hear A Number

VERSE 1
I can hear a number - *"Oh Yeah !"*
when I listen very hard - *"Oh Yeah !"*
I can hear a number - *"Oh Yeah !"*
I better close my eyes for a big surprise.

(spoken)
"Now listen to the drum. Did you count ?
How many bangs on the drum were there ?"

VERSE 2 *(as Verse 1, ending with...)*
(spoken) "Here's the drum again. Did you count ?
How many bangs on the drum were there this time ?"

VERSE 3 *(as Verse 1, ending with...)*
(spoken) "This time listen to the triangle.
Did you count ? How many triangles were there ?"

VERSE 4 *(as Verse 1, ending with...)*
(spoken) "Listen to the triangle again.
Did you count ?
How many triangles were there this time ?"

VERSE 5 *(as Verse 1, ending with...)*
(spoken) "This time, listen to the dog barking.
Did you count ? How many barks were there ?"

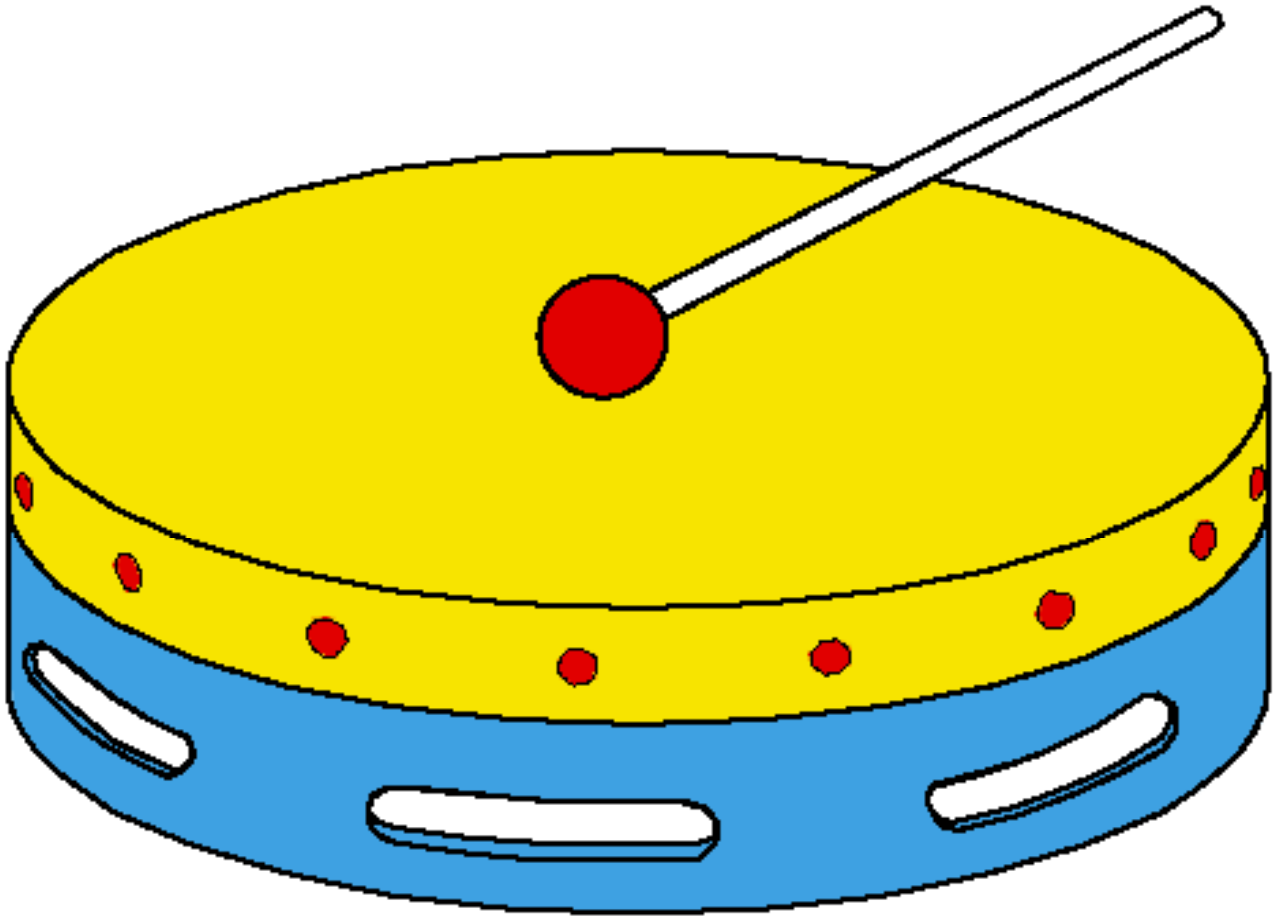
VERSE 6 *(as Verse 1, ending with...)*
(spoken) "Now listen to the chimes.
Did you count ? How many chimes were there ?"

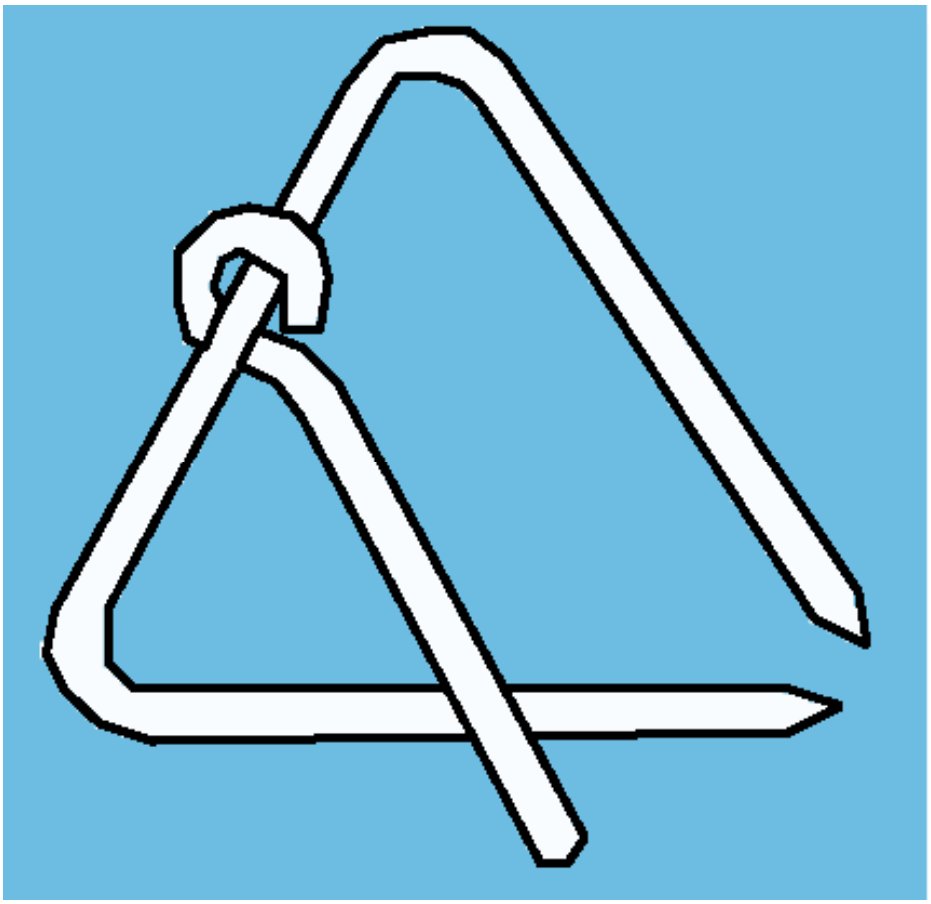
CD 1 track 15

I Can Hear A Number - version 2

This version includes silent gaps for teachers to add their own drum, triangle, dog and chime content. The song lyrics above in red are omitted in version 2.

- Prior to the song, run some practice turns, encouraging children to respond in their own time when listening to sounds.
- As children become more familiar with the structure and pace of the song, they could add the instrumental strikes themselves for others to count up.





Farmer Song

This song helps children to compare increasing/diminishing groups of numbers. During the song, 'one more than' here results in 'one less than' over there, helping children to identify that the two groups of numbers still add up to the same total.

Relates to:

NUMBERS
- counting reliably (1 to 5)
- identifying 'one more' or 'one less' than a given number
- adding two single digit numbers
- adding / subtracting using objects
- adding two single digit numbers
- counting on
- solving problems, including doubling, halving and sharing

SHAPE, SPACE & MEASURE
- comparing quantities and objects to solve problems
- using mathematical language to describe them

Also...

Communication & Language (listening and attention)
- listening to stories, accurately anticipating key events

Expressive Arts and Design (exploring and using media and materials)
- singing songs

Teaching notes:

- Using the PICTURE CARDS supplied, ensure that you have reproduced them back-to-back (with a cow on the front, and a coin on the back of each), then cut out the 5 cards. Use them to guide children through the song for the first time.
- Use coins and toy farm cows to further engage children during this activity.
- Subsequent times, children could 'count down' their fingers on one hand whilst 'counting up' their fingers on the other, practising in advance.
- Use a volunteer to be the farmer, or volunteers to be the cows to help engage children through the song.
- After the song use the picture cards to explore more combinations of coins and cows with children, asking them "how many coins now ?", and "how many cows now ?", etc.

Farmer Song

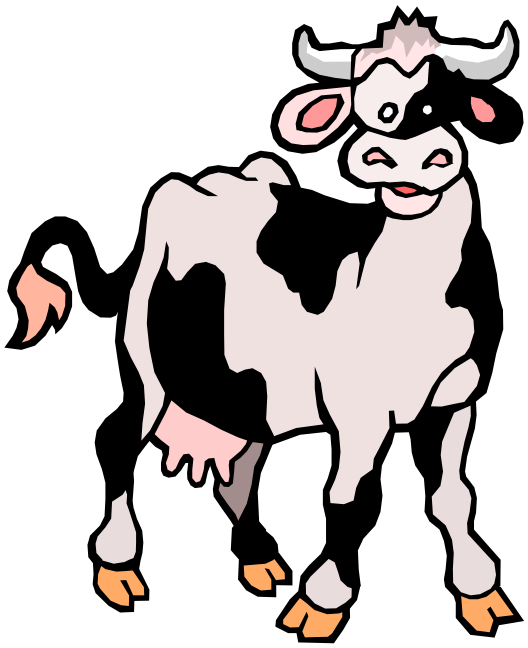
Verse 1
I am a farmer and I have five cows,
but I'm going to market
to sell one right now.
I'll take a gold coin for it if you'll allow.
(spoken) "Thank you kind sir !"
Better count up my coins.
(spoken) "One !"
Better count up my cows.
(spoken) "One - two - three - four."
"All right my lovelies, we'll be home soon."

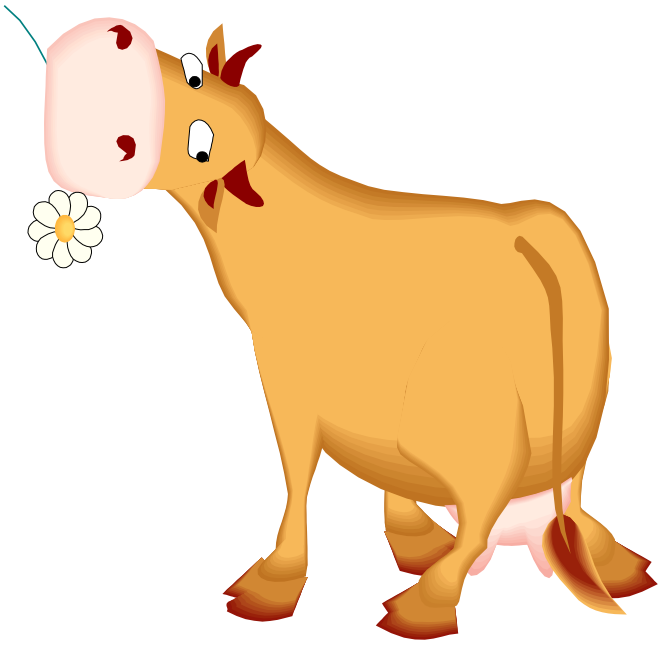
Verse 2
(as verse 1, lines 1 to 4, then...)
(spoken) "Thank you kind madam !"
Better count up my coins.
(spoken) "One - two !"
Better count up my cows.
(spoken) "One - two - three."
"Come on my lovelies - home again."

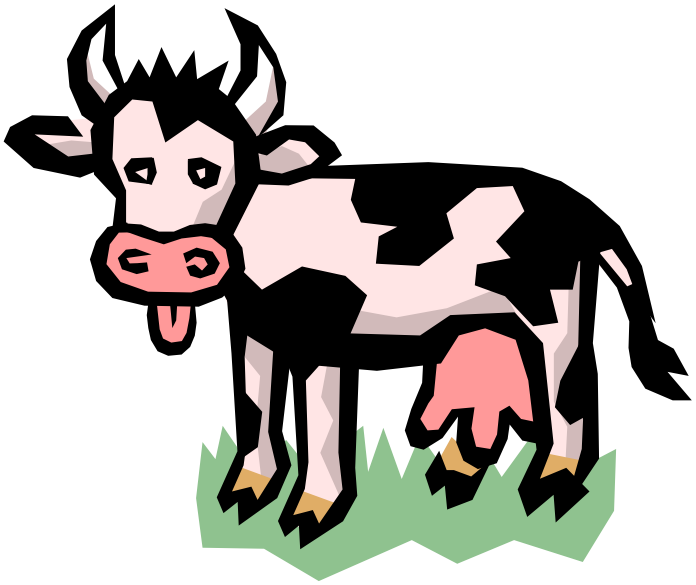
Verse 3
(as verse 1, lines 1 to 4, then...)
(spoken) "Thank you kind sir !"
Better count up my coins.
(spoken) "One - two - three !"
Better count up my cows.
(spoken) "One - two."
"Right then my lovelies - home time."

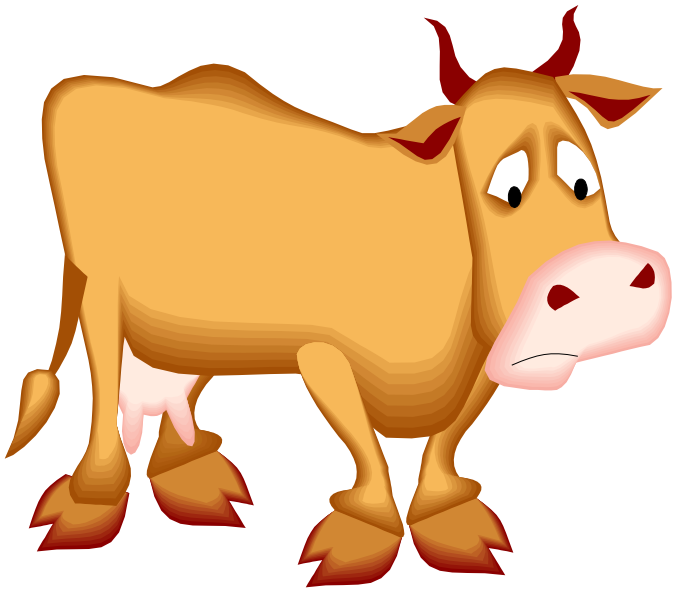
Verse 4
(as verse 1, lines 1 to 4, then...)
(spoken) "Thank you kind madam !"
Better count up my coins.
(spoken) "One !"
Better count up my cows.
(spoken) "One - two - three - four."
"Oh, it's just you and me then, let's hurry back."

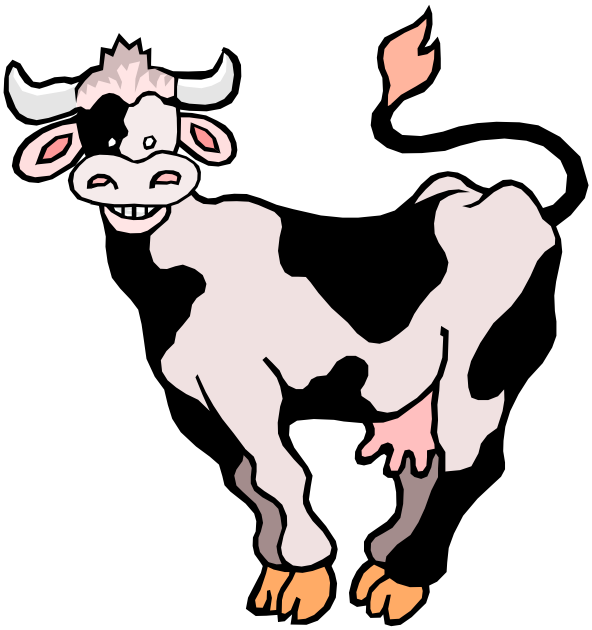
Verse 5
(as verse 1, lines 1 to 4, then...)
(spoken) "Thank you kind sir !"
Better count up my coins.
(spoken) "One - two - three - four - five !"
Better count up my cows.
(spoken) "Oh dear - I don't seem to 'av any left !"











CD 2 track 5

Sharing Apples - version 1

This song explores comparing different quantities and adding up two groups of single digit numbers. Version 2 of the song then allows teachers and children to decide how many apples are to be collected in their groups during the song.

Relates to:

NUMBERS
- counting reliably (1 to 10)
- identifying 'one more' or 'one less' than a given number
- adding / subtracting using objects
- adding two single digit numbers

SHAPE, SPACE & MEASURE
- comparing quantities and objects to solve problems
- using mathematical language to describe

Also...

Communication & Language (understanding)
- following instructions involving several ideas or actions.

Physical Development (moving and handling)
- handling equipment (apples) effectively.

Teaching notes:

- Using multiple copies of the PICTURE CARD supplied or pretend apples, ask children to pick up different quantities from the ground.
- A little basket may help engage them.
- During the song, choose two volunteers to pick up apples as required. It will take some practice to keep up with the song, but should come together eventually.
- Explore the concepts of 'more' and 'less', referring to the groups of apples that children were given.

Sharing Apples

VERSE 1
Apples have fallen on the ground
from under the apple tree.
I'll pick up two, you pick up three
Let's put them together and we can share
the apples from under the tree.
(spoken)
"How many apples have we got altogether ?
Can you count them all up ?"

VERSE 2
(as verse 1, but singing...)
"I'll pick up four, you pick up two."
(and ending with...)
"How many apples have we got now ?
Can you count them all up again ?"

VERSE 3
(as verse 1, but singing...)
"I'll pick up three, you pick up five."
(and ending with...)
"Now how many apples have we got ?
Have we got more than last time or less ?"

VERSE 4
(as verse 1, but singing...)
"I'll pick up five, you pick up four."
(and ending with...)
"And how many apples have we got now ?
Have we got more than last time, or less ?"

CD 2 track 7

Sharing Apples - version 2

This version allows suitable gaps for teachers/children to make their own decisions about 'how many apples' to pick up.

- Prior to the song, decide with children how many apples are to be laid out in groups to be picked up. Use multiple copies of the PICTURE CARD supplied, or real / plastic apples.
- Practise this until you feel that children will be able to keep up during the song and anticipate their role.

CD 2 track 17

Let's Go Looking For A Monster

A song packed full of positional language, helping children to understand twelve positional concepts, with the use of supplied picture cards. The song provides good opportunities for related discussion and activities.

Relates to:

SHAPE, SPACE & MEASURE
- using everyday language to talk about size, weight, capacity, position, distance
- exploring characteristics of objects and shapes (i.e. the mountains, the pathway)
- using mathematical language to describe (i.e. describing the bridge, tunnel, hills, castle, clouds, etc.

Also...

Communication & Language (listening and attention)
- responding to what they hear with relevant comments, questions or actions.

Understanding the World (the world)
- knowing about similarities and differences in relation to places, objects, materials and living things.

Expressive Arts and Design (being imaginative)
- representing their own ideas, thoughts and feelings through music.

Teaching notes:

- Before singing the song, use the PICTURE CARDS supplied to show children where the monster is, encouraging them to describe his positioning.
- Prompt accurate positional language and ask children to say the word phrases from the song (i.e. 'over the bridge', 'behind the trees').
- During singing, show a PICTURE CARD during each verse for children to call out in response to '"Where is he ?".
- Children can later make their own picture choices for each verse.
- Regularly swap around the PICTURE CARDS used in verses.
- Challenge children's understanding by giving the wrong verbal response to the picture being shown.
- Use a monster puppet to further engage children.

Let's Go Looking For A Monster

VERSE 1
Let's go looking for a monster.
Where do you think he will be ?

Under the river or over the bridge.
In front of the mountains.
Behind the trees.

(spoken - looking at picture card)
"Can you see where he is ? Where is he ?"

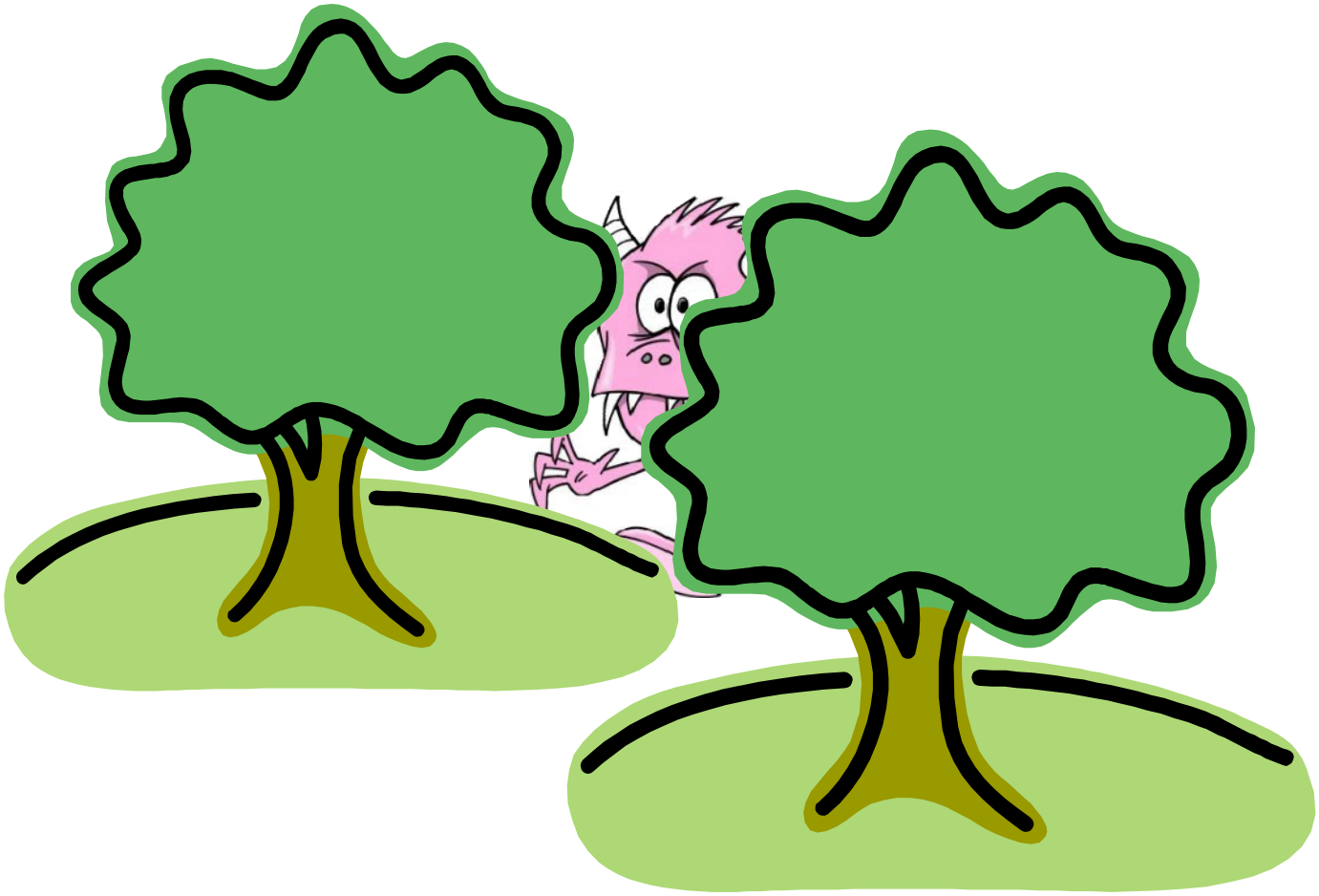
VERSE 2
Let's go looking for a monster.
Where do you think he will be ?
Through the tunnel, around the hills.
On the pathway or in the stream.

(spoken - looking at picture card)
"Can you see where he is ? Where is he ?"

VERSE 3
Let's go looking for a monster.
Where do you think he will be ?
Outside the castle or inside the house.
Above the clouds or below the sea.

(spoken - looking at picture card)
"Can you see where he is ? Where is he ?"

I think I've found him.
I think I've found him.
I think I've found him !



CD 1 track 23

There's A Shape In The Box ! - version 1

Finally, an activity song in which shapes are slowly revealed from your 'secret box'. The song encourages the use of mathematical language as children explore the characteristics of each shape.

Relates to:

SHAPE, SPACE & MEASURE
- recognising, creating and describing patterns
- exploring characteristics of everyday objects and shapes
- using mathematical language to describe them

Also...

Communication & Language (listening and attention)
- giving attention to what others say and respond appropriately

Physical Development (moving and handling)
- handling equipment effectively (revealing shapes from the box)

Teaching notes:

- Make a 'secret box' (perhaps like a treasure chest) in which to put cut-out familiar shapes, but also solid shaped objects such as blocks, buttons (not always round !), pretend food or a book.
- Practise slowly revealing a small part or corner of each shape for children to guess, before revealing all of it.
- Introduce, use and repeat the descriptive language, ' *curvy, straight, pointy, round, big, small* ' and any others you can think of !
- Run the song, encouraging children to join in singing the chorus, but also to take turns describing what they can see as each shape is revealed.

There's A Shape In The Box !

What's in the secret box ?
What's in the secret box ?
Can't believe my socks,
there's a shape in the box.
In the secret box.

(spoken) "Should we have a look ?"

"Is it curvy ? Is it straight ?
Is it pointy ? Is it round ?
Is it big ? Is it small ?"

I want you to tell me now,
tell me what it's called.

Repeat ALL twice more, then end with...

What's in the secret box ?
What's in the secret box ?
Can't believe my socks,
there's a shape in the box.
In the secret box.

CD 1 track 25

There's A Shape In The Box ! - version 2

Version 2 omits the spoken words in red between verses, allowing gaps for teachers to ask their own questions, depending on the shapes you have available.

- As children become more familiar with the song, they could lead it themselves, each taking turns to slowly reveal a shape from the secret box.
- Small groups of children may even be able to run the whole song/activity between themselves !