



Home learning 1R maths

Multiplication

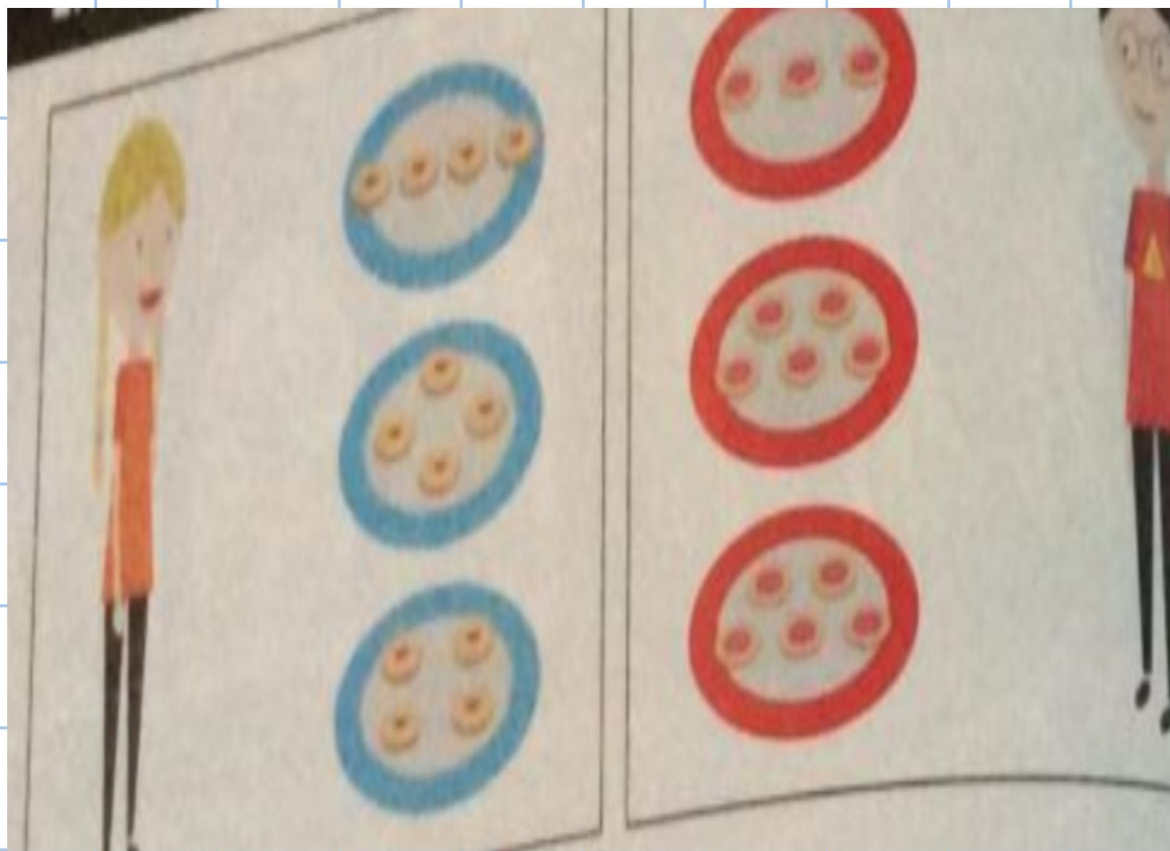
Multiplication

Look at the two groups.

Who has made
equal groups

Sally or Sam?

Explain your answer.



Who has made equal groups?

Multiplication

Allow children to explain similarities and differences in groups. Then they need to explain who (Sally or Sam) did make three equal groups.



There are three groups. Each group has four biscuits.

These are equal groups.



There are three groups.

One group has three biscuits.

The other two groups have 5 biscuits,

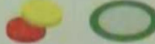
These are not equal groups.





Multiplication

We used paper plates but circles drawn on the floor with chalk, pieces of paper, dishes could be used. The important thing is that they get an opportunity to practically make equal groups.


Activity Time

Work in pairs.

What you need:


- Take 5 plates.
Put 2  on each plate.
- Tell your partner how many  there are altogether.
- Take 3 plates.
Put 6  on each plate.
- Tell your partner how many  there are altogether.

There are 5 groups of 2.



Multiplication

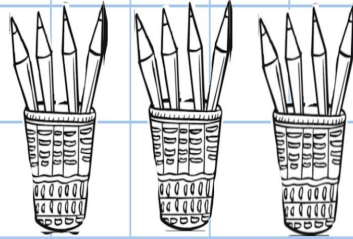
Show children the groups.

Discus which groups have equal quantities which do not

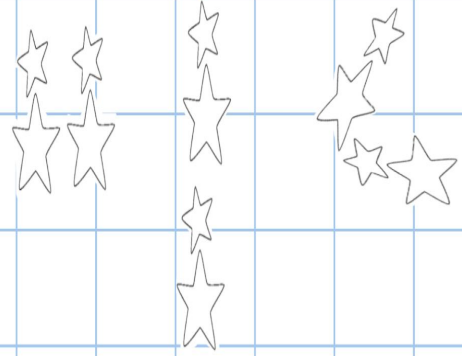
The important aspect is that they understand the language equal means exactly the same.

Guided Practice

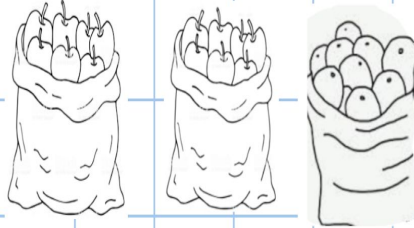
a)



c)



b)



Which of these groups are equal?

no

yes

yes

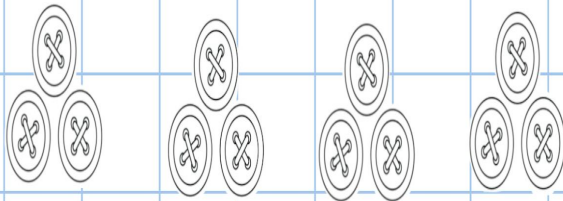
Multiplication

So, now it gets trickier!


Children draw each group, as it is guided talk the children through what they are doing. Copy the writing filling in the squared values.

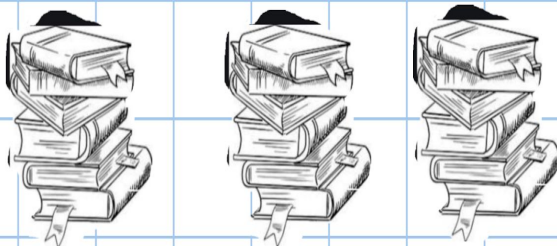
We are getting there!!!

guided work




groups

Each group
has 



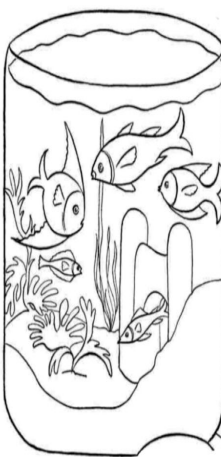
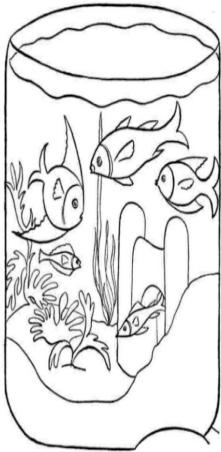
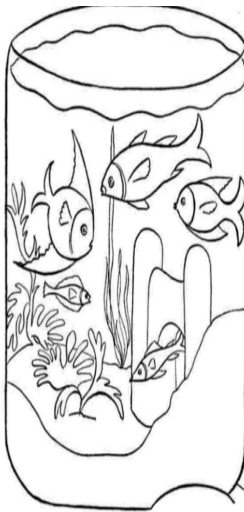
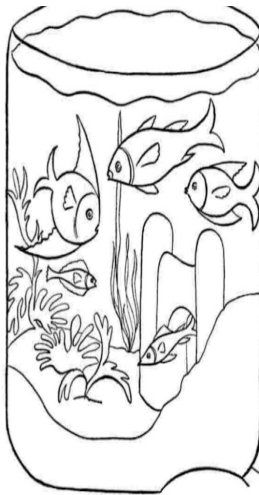
groups

Each group
has 

Multiplication

So now this is independent!
If children have grasped all
concepts they will do this
easily if not go back and
revisit previous sessions.

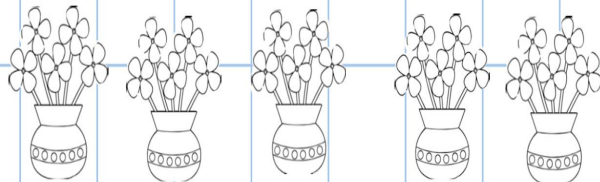
Children draw the equal
groups (fish tanks and
fishes) then write the
corresponding sentence.



groups
Each group has
fishes

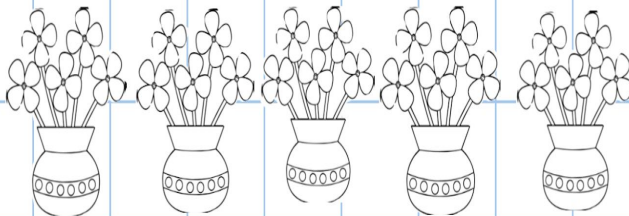
Multiplication

Just let them run with this
now!!! (hopefully!!!)



groups

Each group has
flowers.



There are flowers
altogether.

Multiplication

So now it should just come naturally so let's push them further!

Once complete ask them to draw a part whole model that represents the equation. Tell them 12 is the whole number



groups

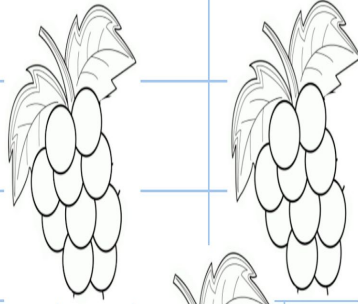
Each group has bottles.

There are bottles altogether.

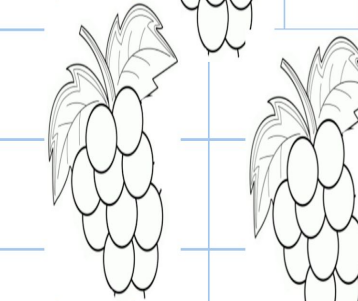
Multiplication

Now they have the basis, they can count in 10's they can make equal groups so can they apply what they know independently?

Give them this they can read it, it promotes reading for meaning can they explain/ draw how to find the answer?



Here are the grapes in the fruit shop.

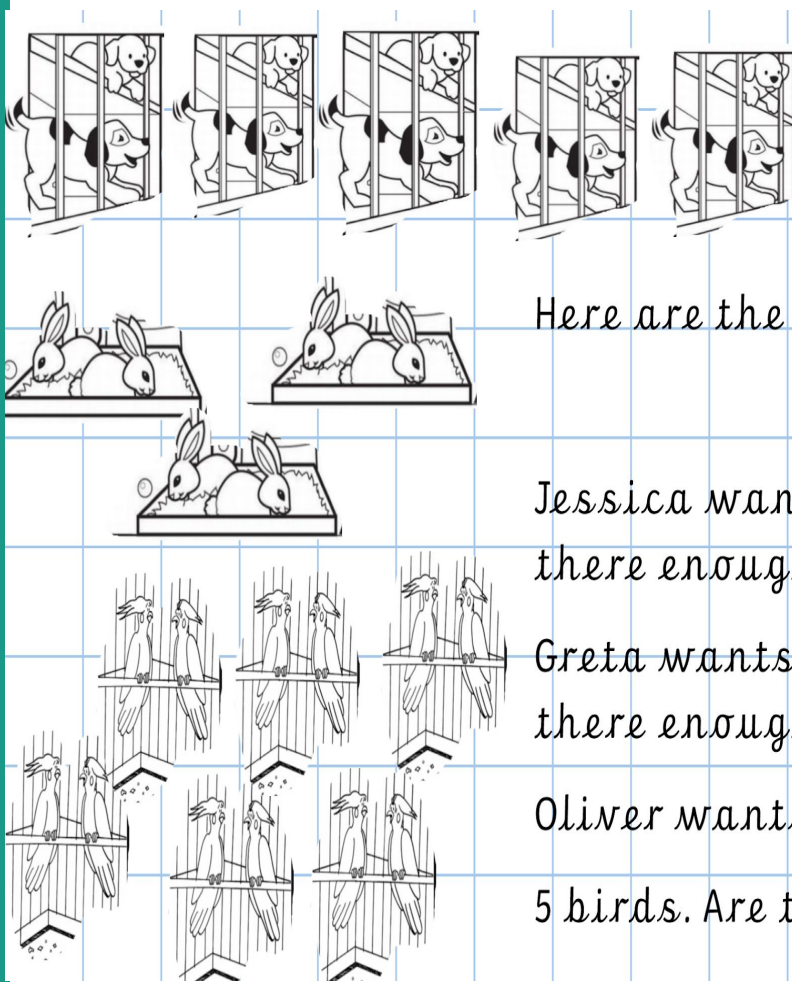


Max wants to buy 40 grapes. Are there enough? How many equal bunches of grapes will he have?

Multiplication

Well you little clever clogs do this then!!!! And of course you do not need help to do it you need to show us how you did it with drawings or calculations.

Eg 14 lots of 2 = 28 Jessica wants 10 pets. 28 is more than 10, yes there are enough.



Here are the pets in the pet shop.

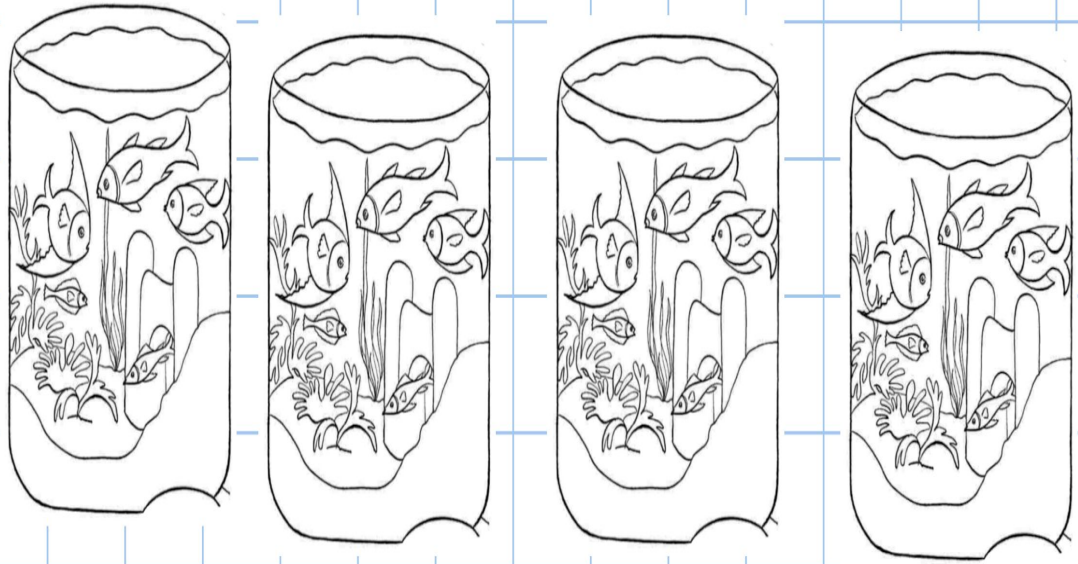
Jessica wants to buy 10 pets. Are there enough?

Greta wants to buy 12 dogs. Are there enough?

Oliver wants to buy 5 rabbits and 5 birds. Are there enough?

Multiplication session 2

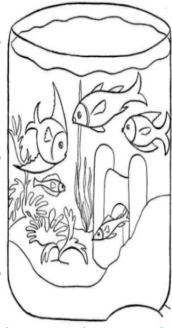
This is just a revision make sure they recall their session yesterday. Quick discussion.



Do you agree that each tank has equal amounts of fish?

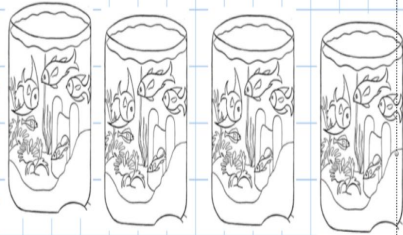
Multiplication session 2

Again quick discussion, are
they secure with the
language equal



The fish are in equal groups.

This means that each tank has the
same number of fish.

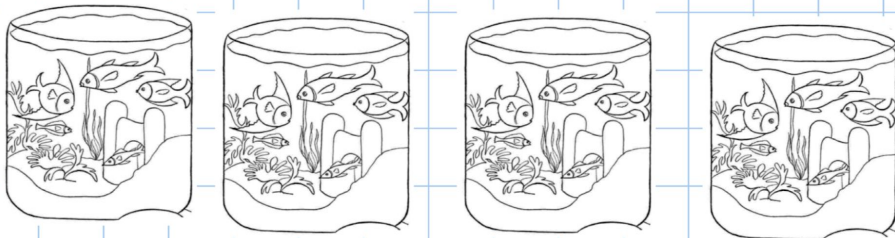


How many fish are there
altogether? How can you
tell?

Multiplication session 2

So now we are teaching our
lambs to understand the
language equal and
understand equal is the
beginning of multiplication.
When they are talking about
4 groups of 5 they find this
annoyingly difficult-
preserve, please.

Let's learn



There are tanks.



Each tank has fish.



4 tanks of 5 = 20



4 groups of 5 = 20



4 fives = 20

Multiplication session 2

Talk this through make the
groups see the groups
understand them.



There are 3 pots, do you disagree?

3 pots of 2 = 6

3 groups of 2 = 6

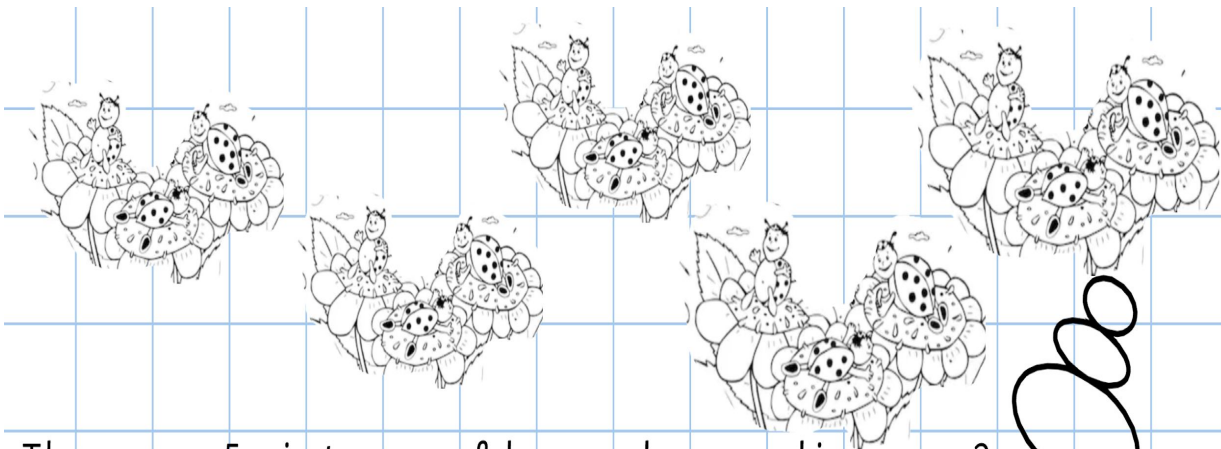
3 twos = 6

There are 6 flowers.

Multiplication session 2

Ask children to explain what they can see. How many groups are there? Are they equal, how do you know? How many bugs are there altogether? Explain how you know....

If they say five lots of 3 is 15 you have smashed it!!!!



There are 5 pictures of bugs, do you disagree?

5 pictures of 3 = 15

5 groups of 3 = 15

5 threes = 15

*each
picture has
three bugs*

There are 15 bugs altogether.

Multiplication session 2

Discuss model writing the sentence explain the sentence and get them to discuss their ideas too. Children draw and copy sentences.

Guided work



There are groups.

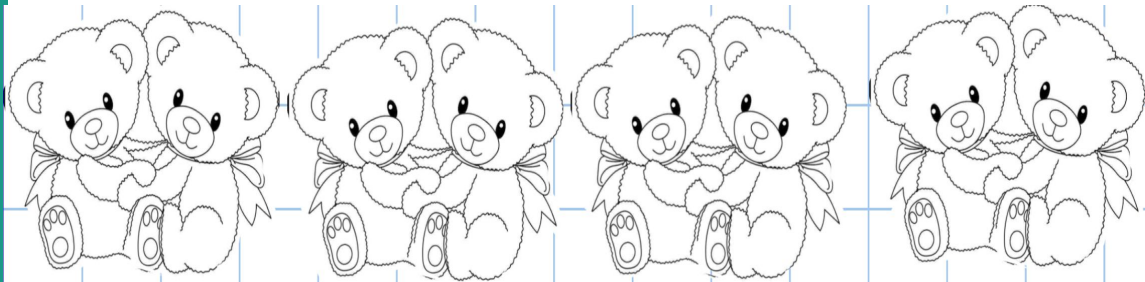
Each group has apples.

fives =

Multiplication session 2

Independent - no help!

Children draw bears write
sentences.



There are groups.

Each group has bears.

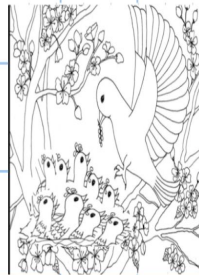
twos =

There are bears altogether.

Multiplication session 2

Again another task to be completed independently.
Good luck lambs, I know you can do it!!!!

Independent- record in your books



There are trees.

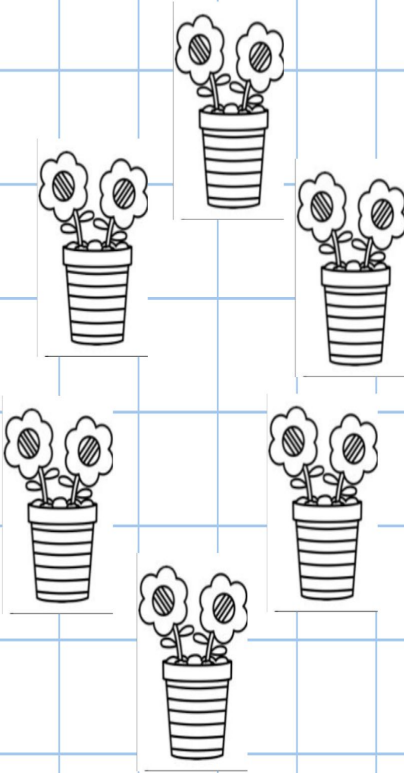
Each tree has birds.

tens =

There are birds altogether.

Multiplication session 2

Keep going- pleas draw a
bar model to show this
calculation too.



There are pots.

Each pot has flowers.

twos =

There are flowers altogether.

Multiplication session 2

Remember this????

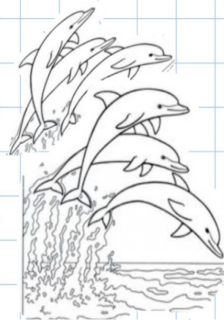
Independent- record in your books



There are schools.



Each school has dolphins.



sixes =

There are dolphins
altogether.

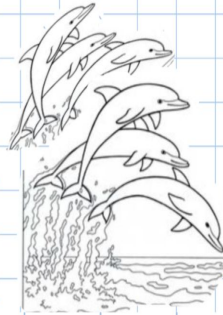
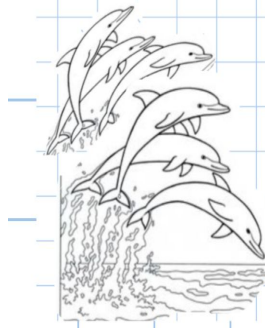
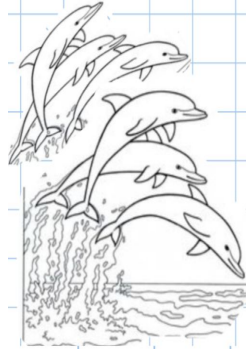


Multiplication session 3

Discuss this. What value do you think goes into each square? (1) Why? (there are 6 squares one for each dolphin, in each school)

$$1+1+1+1+1+1=6$$

3 lots of 6 = 18



Independent- record in your books

$$\square + \square + \square + \square + \square + \square$$

$$\square + \square + \square + \square + \square + \square$$

$$\square + \square + \square + \square + \square + \square$$

3 groups of 6 =

So now they are beginning to identify the patterns in numbers as they make equal groups.

6 cookies in 2 rows.



Can you explain the pattern in the values?

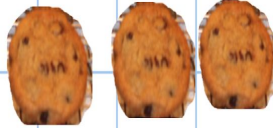
What will be the next sequence in the pattern?

Multiplication session 3

Here we need to talk to the children about repeated addition. It is the beginning of them identifying and using doubling but they don't know it yet! (bless!)

$$3+3+3+3+3$$

6 cookies in 2 rows.



12 cookies in 4 row.



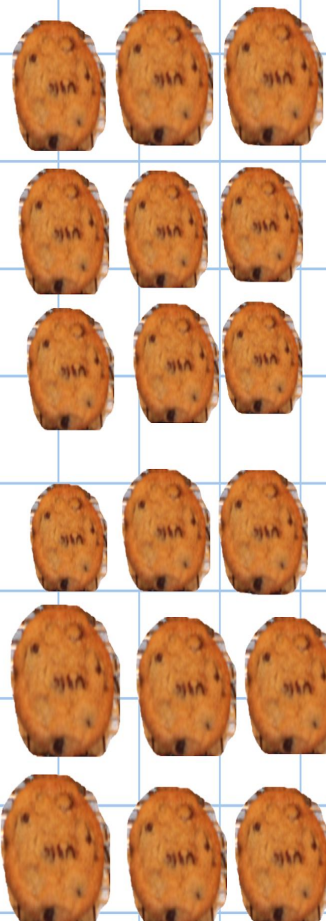
cookies in 6 rows.

*If I double each value I
can work out the
missing value.*

9 cookies in 3 rows. why?

Multiplication session 3

Clarify their thinking -
ensure they understand
repeated addition. In
addition they now need to
understand there are 6
groups of three
 $3+3+3+3+3+3 = 18$



6 rows of 3 = 18

6 threes = 18.

Multiplication session 3

So now lets put the same
idea into another concept.
How many equal groups are
there? (2) how many
soldiers in each group? (10)
2 lots of 10 equals 20

$$10 + 10 = 20$$



Multiplication session 3


Its so important that child
get the opportunity to
manipulate equipment. Let
them make these groups
(arrays!!!) give them
different values (multiples
of 18,8, 15, 25, 5,100) make
groups (arrays of 2,5, 10's)

Activity Time


Work in pairs.

What you need:

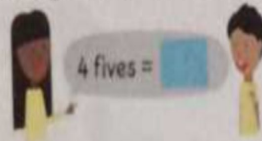
① Make equal rows of ●.



② Take turns to talk about the rows of ●.



③ Work together to figure out the total number of ●.



Multiplication session3

Hey up! How far have they come???? I love their enthusiasm and desire to learn! Guys you are amazing!!!

Discuss the x sign. Please.



☐ rows

2 eggs in one row

☐ twos = 12

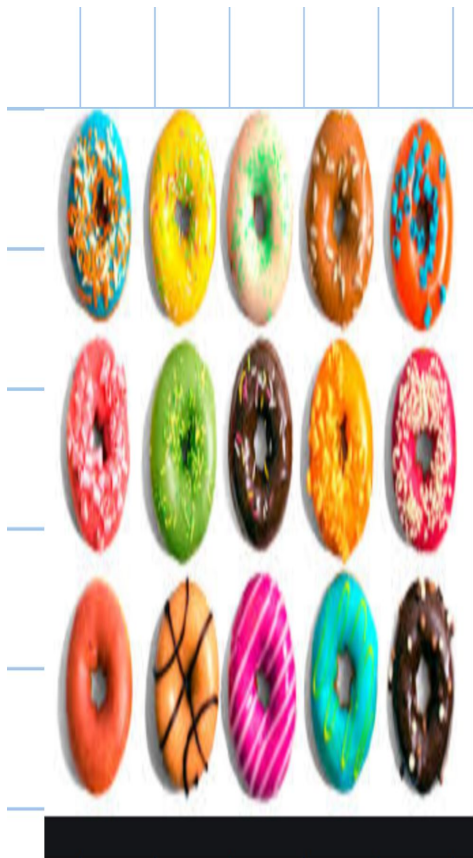
There are ☐ eggs altogether

$$2+2+2+2+2+2=12$$

$$2 \times 6 = 12$$

Multiplication session 3

Draw the donuts write the sentences and write the extended calculations too (repeated addition) then the x sentence if understanding it.



rows

5 dough nuts in one row

lines = 15

There are dough nuts altogether.

Multiplication session 3

Get children to draw the
sweets record as in previous
sessions. How many groups?
3 lots of four equals etc

Tom has 3 bags. He puts 4 sweets in
each bag.



How many sweets does he have
altogether?

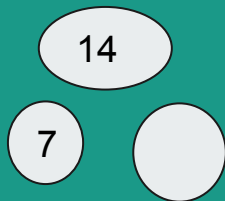
$$4 + 4 + 4$$

$$4 \times 3$$

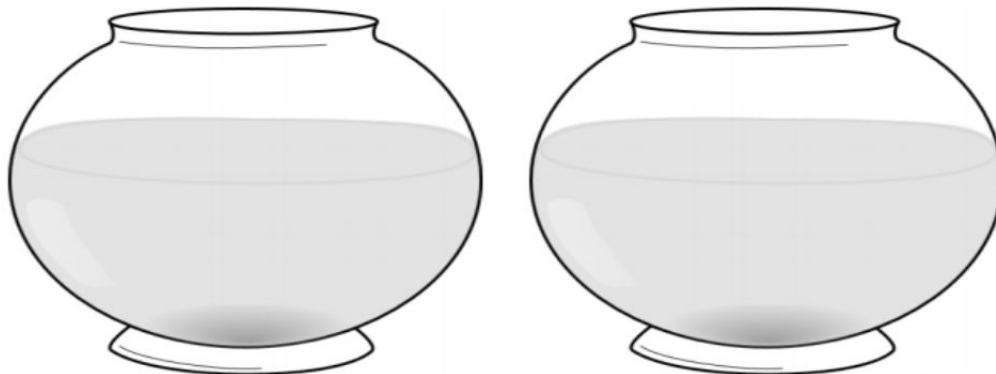
Multiplication session 3

Get children to draw the fish
record as in previous
sessions. How many groups?
2 lots of seven equals etc

$$7+7=$$



Abbie has 2 fish bowls. She puts 7 fish
in each bowl.



How many fish does Abbie have
altogether?