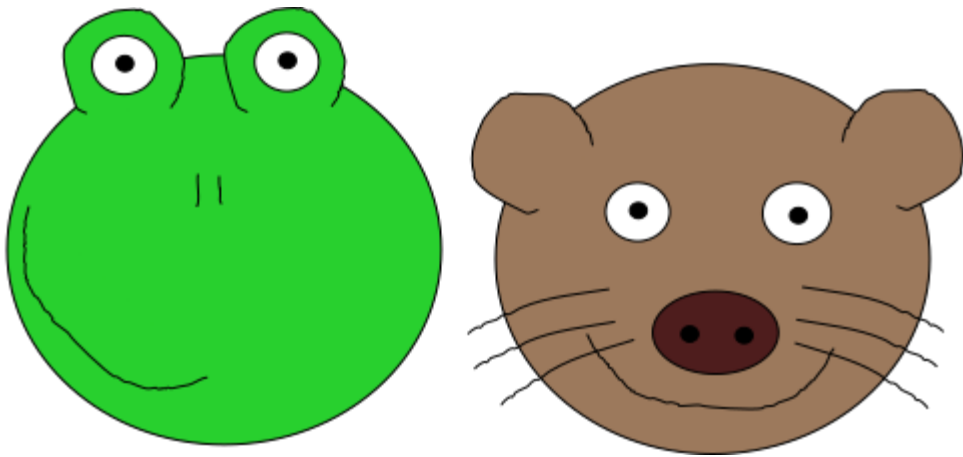


# Froggottter Scales Activities



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Youtube : Frogotter

Please note that this kit is not a toy.  
It is a box of products intended for educational purposes  
in a pedagogical context under the surveillance of an adult instructor.

Please don't allow your child to play with the contents of this kit unsupervised.

The adult instructor should ensure they understand any potential hazards associated with the activities and determine whether they are suitable to use with the child under their care.

This kit contains small parts, which could be a choking hazard.

There is a small risk of burning if you short circuit the electronics kit, please take care.

## ❖ Introduction

- ❖ I hope that you will enjoy using your Scales to explore numbers with your child. This booklet contains a few ideas of activities that you can do with your Scales.
- ❖ The Froggott Method of learning is centred on the Three R's: Relax, Relate, Repeat.
- ❖ **Relax** - try to start the activity in a good mood yourself. Sit somewhere comfortable. Be encouraging and calm.
- ❖ **Relate** - there are lots of opportunities during the activities to learn about each other. Children learn well if they are sharing their learning with an adult they trust. Bring your own relationship into the learning.
- ❖ **Repeat** - learning takes time and repetition is incredibly helpful. All of the activities in the box are designed to be enjoyed several times. It is particularly important to repeat activities that your child finds tricky.
- ❖ Some of the Extension Activities require additional items. But, the most important resource is the adult working with the child. Children learn a great deal through conversation and play with adults. Much of the National Curriculum focuses on children expressing their ideas and listening to other people's ideas. The conversations that you have whilst completing the activities are a key component of education. You can model attentive listening and insightful questioning by taking an interest in your child's ideas.
- ❖ Though it can be fun to have a bit of a challenge, attempting activities that are far too hard is likely to demoralise your child and not to help them master new skills. Pay attention to non-verbal cues as well as what they're saying, so that you know when things are getting too tricky.

- ❖ If you have any questions or find the instructions unclear, there's a Frogotter Youtube channel with the activities demonstrated. You might find it helpful to watch the short video with your child if you get stuck.

### Which Word Rhymes?

- 1) Read the nursery rhymes below to your child, when you get to a choice of words, put a frog on the one that doesn't fit. Two words rhyme when they have the same sound at the end - like 'rat' and 'cat' or 'blue' and 'shoe'.
- 2) See if you can think of another rhyming word that would fit in the rhyme. Re-tell the rhymes with your substituted words.

Hickory, dickory dock,  
The mouse ran up the clock / wall,  
The clock struck one, the mouse ran down.  
Hickory, dickory dock.

Twinkle, twinkle little star,  
How I wonder what you are / eat,  
Up above the world so high,  
Like a diamond in the cloud / sky.

Baa, baa black sheep, have you any wool?  
Yes sir, yes sir, three bags full / gone.

## Extension

Have a look through a book of poetry and see if you can spot the words that rhyme. Can you think of any other rhyming words that would fit there instead? Try reading the poems with your own substitutions instead of the proper words.

### Emphasis

1) Read the sentence below to your child in a normal voice.

This is your pet.

2) Put a frog under the first word of the sentence. Now read it again, placing emphasis on the first word.

3) Ask your child if they can repeat the sentence, placing emphasis on the first word too.

4) Move the frog to the second word. Now read it, placing emphasis on the second word.

5) Ask your child if they think the sentence implies something different when you change the emphasis. When we emphasise 'this' it implies that there's some surprise that the object we're discussing is a pet. When we emphasise 'is' it implies that we're insisting the object is a pet.

6) Move the frog to the third word. Both try and read the sentence emphasising the third word.

7) What meaning is implied when the 'your' is emphasised?

8) Move the frog to the fourth word. Both try and read the sentence emphasising the fourth word.

9) What meaning is implied when the 'pet' is emphasised?

10) Can you make the statement below into a question, just using your voice:

Reading is fun?

## Extension

Next time you read a story together, pause and try reading a sentence with varied emphasis. How does it change the meaning of the story? This could be a very interesting exercise to do with the title of a book before reading it for the first time.

### Investigating Scales

- 1) Get out the Frog Scales. Pick any number from the plastic number shapes and put it on one side of the scale. Count how many frogs it takes to balance the scale.
- 2) Pick two numbers and count out how many frogs it takes to balance them both.
- 3) Put a small toy - like a car - on one side of the scale, count how many frogs it takes to balance the toy.
- 4) Take it in turns to put frogs on one side of the scale, and see if your partner can put down the right plastic number or numbers to balance the frogs.

## Extension:

Find some small toys or items of stationary around the house. Guess how many frogs they will weigh, then experiment to see if you were right.

### Speed Counting One

- 1) Take it in turns to put a pile of frogs on the table, the other person must count the frogs, and say the total number as quickly as possible. (NB. begin with just one or two frogs, the aim of the game is to count the frogs, without counting them

out '1, 2, 3' etc. At first, your child may only be able to count one or two in this manner.)

- 2) Play again, but this time, the counter must close their eyes, giving the frog placer time to put the frogs down in a pattern. It doesn't matter much what pattern you use, but you could use the same pattern as the spots on a die. Most people find it easier to quickly count frogs if they are laid out in a pattern. See how many you can Speed Count now.
- 3) Next try this two round version. The frog placer arranges frogs in a pattern; the counter looks and counts as quickly as they can; then they close their eyes again and the frog placer removes a number of frogs, or adds some; the counter looks again and sees how quickly they can count the new total - is it quicker than the first time?

## Extension

Try speed counting with other toys, or books, or even cutlery. How quickly can you count whether enough places have been laid at the table?

### Speed Counting 2

- 1) When adding groups together, it's quicker if you don't count out every single item again. Start by putting down a small pile of four frogs and counting them together, now put down one more frog, how many are there now? Can you count on from four, rather than starting at one again?
- 2) Now start with ten frogs and add another two. It's much quicker to say 'eleven, twelve,' than it is to start all over again with '1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.'

- 3) Continue with different numbers of groups of frogs, until you are comfortable counting on, rather than starting again at one each time.
- 4) Take it in turns to place frogs and to guess. The frog placer should lay down two piles of frogs and tell the counter how many are in each pile. The counter has to say the total number of frogs in both piles as quickly as possible (NB. just like with Speed Counting One, the aim is to get straight to the total, rather than count out '1, 2, 3,' etc. so, begin by adding only a few frogs).
- 5) Rather than having piles of frogs, try writing the numbers down: '3+2=' can you Speed Count the answer? Take it in turns to write sums and to solve them.
- 6) Once your child has mastered Speed Counting, try setting a run of problems where the answer is always ten: 6+4, 5+5, 3+7. Talk about the different ways of making the number ten. We call these pairs 'number bonds'.

## Extension

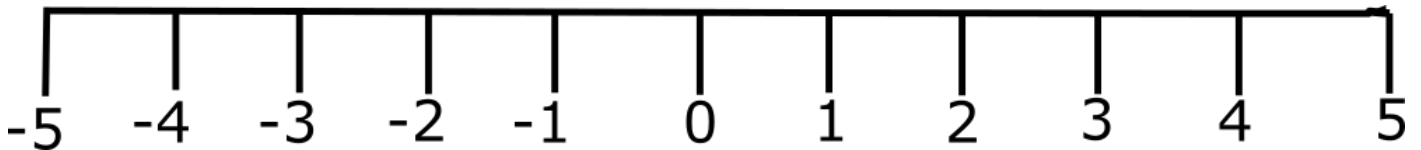
Write the number bonds to ten out on a piece of paper and stick it up somewhere you can see it. If you can learn these by heart, it will help with maths.

Once you've learned them, you could try and find the number bonds to twenty and learn them too.



## Negative Numbers

1) Put a frog on '0' on the number line below. Add five, by jumping the frog five to the right.



2) Take away three, by jumping the frog three to the left.

3) Take away two, by jumping the frog two to the left.

4) Now take away one more, jump the frog one to the left, past zero and onto '-1'. If you take away one more than you have, you get a negative number.

5) See if you can use the number line to answer these sums:

$$4 - 7; 5 - 10; 3 - 8; -3 - 2; -2 + 4$$

### Extension

If you can, make your own giant numberline, using chalk on your driveway or patio, try doing the sums using yourself as a giant frog.

You could also ice a numberline onto a swiss roll and use a sweet as a counter.

## Frog Balance 2

- 1) Use the frogs to show  $3 \times 2$  on one side of the balance.
- 2) Use the numbers to show  $5 + 1$  on the other side of the balance.
- 3) Since  $3 \times 2 = 5 + 1$ , the sides should balance!
- 4) Now try  $3 + 2$  on one side and  $5 \times 1$  on the other side. Since  $3 + 2 = 5 \times 1$ , the sides should balance again.
- 5) Can you think of an addition sum that gives the same answer as  $3 \times 6$ ?
- 6) Put  $3 \times 6$  frogs on one side of the balance and add your numbers on the other side and see if the scales balance.
- 7) Can you make two sums that balance one another?
- 8) Take it in turns to put a number of frogs on one side of the balance and think of a sum that gives that answer to put on the other side of the balance (you'll have to be careful not to use very big numbers because there are only so many frogs!).
- 9) Take it in turns to write a sum down with '=' after it. The other player should write another sum that would give the same answer. Now your numbers can get as big as you can calculate!

### Extension

If you have lots of identical toys at home, e.g. lego bricks, you might be able to do balance maths with bigger numbers.