



A Day at the Old Schoolhouse

*A Number Story by 1JP
November 2011*

Dedicated to the
NSW Schoolhouse Museum

North Ryde
New South Wales

Thank you for giving us such wonderful information about schools in the olden days.

We are lining up ready to go on our excursion to the old schoolhouse!

Hang on! If there are 22 students lining up in twos, how many pairs will there be? This seems to be a maths problem!

22 divided by two equals 11, so there will be 11 pairs.



We're on the bus now.

There are 22 of us, but there are 60 seats on the bus.

How many seats are there for IBM, the class that is coming with us?

60 seats take away 22 leaves 38 seats for IBM.

Suddenly everything that we are thinking about is becoming a maths problem. Numbers are everywhere!

2 x 1



There are so many things to look at on the way to the schoolhouse.

How many petrol stations did we see on our journey? I think there was one every 4kms, and the journey was 12km in total.

That means there was one at 4km, one at 8km, and one at 12km, which means there were 3 in total!





Here we are at the schoolhouse with the original gas lamp! I wonder how many of those there are in Sydney now?

We have 11 pairs in our line. It takes each pair about 5 seconds to walk through the gate, so I wonder how long it will take all of the class to get through the gate?

If we count 11 lots of 5 seconds, we know that it will take 55 seconds for us all to walk through the gate.

2+2

Here is the lovely Mrs Robertson. It is now 2011. If she was born in 1951, I wonder how old she is now?

By counting in groups of 10 years, we know that she is 60 years old.



25 divided by 5

I'm starving ... thank goodness it is recess! Oh no, there are only 8 benches.

There are 22 people in 1JP and 18 people in IBM at the moment. How many students want to sit on the benches?

So how many people need to sit on each bench?



We worked that there are 40 people altogether. If there are 8 benches, the sum is 40 divided by 8, which means that 5 people need to sit on each bench.

We have so much to do today. There are 4 activities, and they each take half an hour. When will we finish our activities?

It is 11 o'clock now. What time will we finish?

We know that 4 lots of half an hour equals 2 hours, so 11 o'clock plus 2 hours means we will finish at 1pm.



4+3

How exciting! I love singing the Grand Old Duke of York. We are being asked to put our hands up.

If there are 22 students and 2 teachers in the circle, how many hands are in the air now?

Well we know that double 22 is 44, then 4 more hands equals 48 hands in the air.

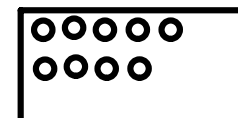
eight



Arhhh! What a
gorgeous class – who
are those children?
Oh – 1JP!

Over half of the class
are boys. If there are
22 students altogether,
how many boys could
there be?

If half of 22 is 11,
we could have between
12 and 22 boys in
the class!



We are so good at skipping! If all 22 of us are skipping at the same time, how many toes are moving?

Well, we each have 10 toes, so 22 times 10 equals 220 toes moving around the maypole!



Get ready to march, everyone!
Here comes Mrs Robertson with
her drum. Left, right, left, right.

Oh dear! There is another maths
problem for us. If we have to
walk 100 metres around the
schoolhouse, and each step is half
a metre, how many steps will
each student take?

If we take 2 steps per metre, we
need to double 100m. This means
it will take us 200 steps to walk
around the school.

Does it make any difference if I
march faster?

It won't make a difference walking
faster, because we still need to
walk the same distance!



five plus six

What – more exercise!
We've already been dancing and marching! We are now asked to take out two dumbbells each from this tray. But are there enough for our whole class of 22 students?



If not, how many more do we need?

Well there are 24 dumbbells in this tray, and we need 44. Counting by tens, from 24, we can work out we will need 20 more dumbbells.

double 6

We are doing all sorts of fun exercises. It is just as if we are soldiers – up, down, left, right. We have to do them all in time to some classical music!

We do 6 types of exercise and each takes two minutes. I wonder how long we have been exercising for altogether?

By counting by 2s 6 times, we can work out that we have exercised for 12 minutes.



Now it's down to work in the classroom! It is so different to our classroom. Where is the interactive white board? Instead the teacher has to draw everything on the blackboard with chalk! Another teacher has to play the piano when we sing because there is no CD player.



There are 4 groups of us doing different activities – the games, the treasure hunt, stamping and the mystery case. Another problem – how many students could there be in each group? So ... we have 22 students in the class. If I divide them into 4 groups, that makes 5 in each group, with 2 left over, So we could have 2 groups of 5 and 2 groups of 6.

half of 28

What is that stick she is holding? I'd better be good or else she might hit my hand with the cane!

Her students have 20 spelling words each week, but we have 12. How could "friends of 10" help me work out how many more spellings words they have than us?

We know that the friend of 2 is 8, so the answer is 8 as we are going to the next decade!



$$5 + 5 + 5$$

What's that hole in the desk? Oh - it's an inkwell. If one inkwell is shared by 2 people, how many inkwells would our class of 22 need?

We know that half of 22 is 11, so that means we need 11 inkwells.



The next even
number after 14

What's happening now? Is the teacher baking?

No! That is a jelly tray that helps her to copy work for the students. She doesn't have a photocopier like we do! It must be so slow for her. If she is copying 3 sheets for each student in our class (22), how many times would she need to put a sheet of paper in the tray? We know that the sum to work this out is 22 sets of 3 which is $22 \times 3 = 66$.



seventeen

Oh good! I do love treasure hunts. We are looking for all sorts of things like ink bottles and old-fashioned sewing machines.

How many objects did we each have to find? 12



So, how many did the three of us need to find in total?

We have to find 3 lots of 12 = 36.

2 groups of 9

Wow – look at Oscar with his cool white gloves on! He is looking at interesting objects from the past like old books.

But if there are 3 pairs of gloves, how many finger holes are there altogether?

We know that each pair of gloves has 10 finger holes, so 3 pairs has $3 \times 10 = 30$



1 number
before 20

Stamping was great fun. There were 3 animal stamps, 2 clock faces and 4 numbers. Help me – I can't stop thinking about maths! How many stamps were there in total?

If we count up all of the stamps there are 9 altogether.



twenty

Even though these are old-fashioned games, they are still fun to play. Some of us like cat's cradle, and others like jacks using sheep knuckles!

There are 12 games on the table and 3 of us want to share them out. How many games do we each have?

We know that we share 12 games between 3 people, so each person gets 4 games.



$$20 + 1$$

In the old days this was the canteen! The students couldn't buy icy poles because there were no freezers.

There are 8 pieces of bread in this "tuck shop". I wonder how many sandwiches there are?

We know that each sandwich has 2 pieces of bread, so there are 4 sandwiches altogether.



double 11

We look like perfect students, don't we! The girls and the boys had to sit separately in the old days! There are 5 desks for us to sit at, and no more than 5 could sit at each one. How many desks do we need for our class?

We have 22 students, so 22 divided by 5 is 4 with 2 remaining, so we need another desk for those people making a total of 5 desks.

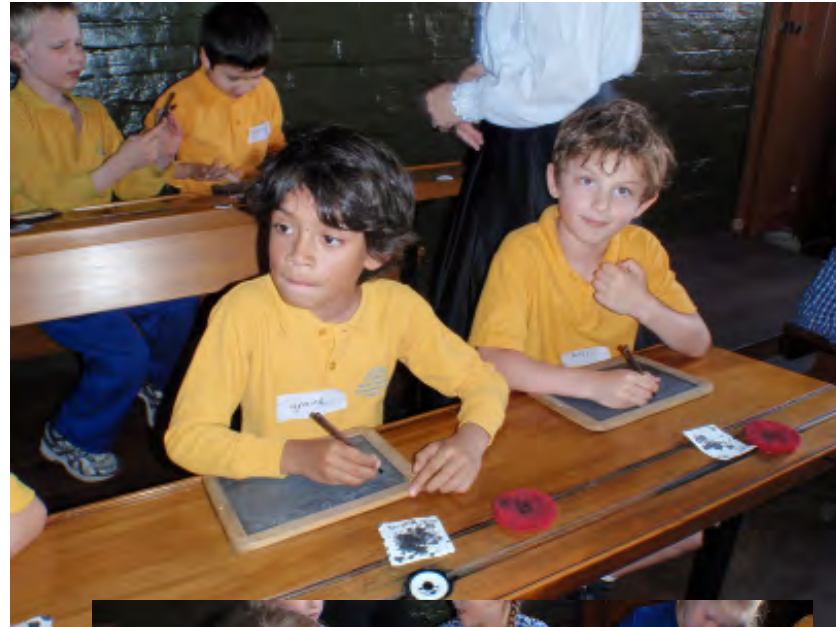


How strange to think that long ago, students wrote on slate. I wouldn't like that as we would have to rub out all of the work that we had done! I like taking books home to mum and dad so that they can see what I have done.

I wonder how long these slates are?

I would guess that they are 20cm long and 15cm wide.

two dozen



Oh uh! This could be a bit messy! I am practising writing with ink pens, which feels very grown up. In the old days the students filled up the inkwells.

Each bottle holds 500ml, and they pour 50ml into each inkwell. I wonder how many inkwells can be filled from one bottle? 500 divided by 50 is 10 inkwells.

What shape would you say the inkwell would be if I took it out of the desk?
A cylinder.



In the old days they used to just copy from the board until their writing was perfect. I'm getting distracted though and keep seeing lots of shapes in the room.

What are these shapes:

- the blackboard?
- the chalk?
- the red blotters?

A rectangle, a cylinder and a circle.



We think that the cost of this excursion is very reasonable. It is only \$12 per student. 20 students paid the office straight away. How much money did the office receive?

We know that this a multiplication: 12×20 . We know that $12 \times 10 = 120$, so double is 240.



We're so tired but have had such fun and learnt so much about schools in the old days. But do you think we sleep on the bus? No way! We start singing to Mrs Penn!

The bus arrives back at school at 2pm. We left school at 10am, so how long have we been away for in total?

It's 4 hours, because I count 11, 12, 1 and then 2 o'clock.

$$1 + 4 + 23$$



Thank you very much for
reading our book, we
enjoyed the day very much.

Goodbye for now!

From 1JP