

Singapore Math Training - K-1 Number Sense

1. Philosophy/Strength

– Math taught in logical, step by step manner based student's prior knowledge and experiences. All concepts progress from concrete experience to a pictorial stage and finally abstract level.

- Piaget, "In order for a child to truly understand a number or concept, they must see it in a variety of ways."

2. Phonemic Awareness of Math

- Learn language and concepts of math first

part, part, whole/greater, less than/ patterns, etc.

- Look and Talk experiences

3. Real World Math

- "Have You Seen Any Good Math Lately?"

4. Number Sense – an intuitive feel for numbers and their relationships

- Frequent, meaningful exposures to language, concepts, skills from concrete, to pictorial, then abstract

- "Today's Number"

- "My Book of Numbers"

- Partner Games

5. Think Time

- Validate Problem Solving Variations (Number Flexibility)

6. Make A Ten – 10 is the benchmark of our number system

- learn number bonds

- count objects daily

- money bag, class group reward

- regroup early

- # of day, letters in our names, kids in class, scissors in the room, siblings, people in our family, buttons on clothes, etc.

7. Parents should "Look and Talk" and use & count money often (teaches rote counting, one to one correspondence, multiplication/skip counting)

Look & Talk

Sample Questions:

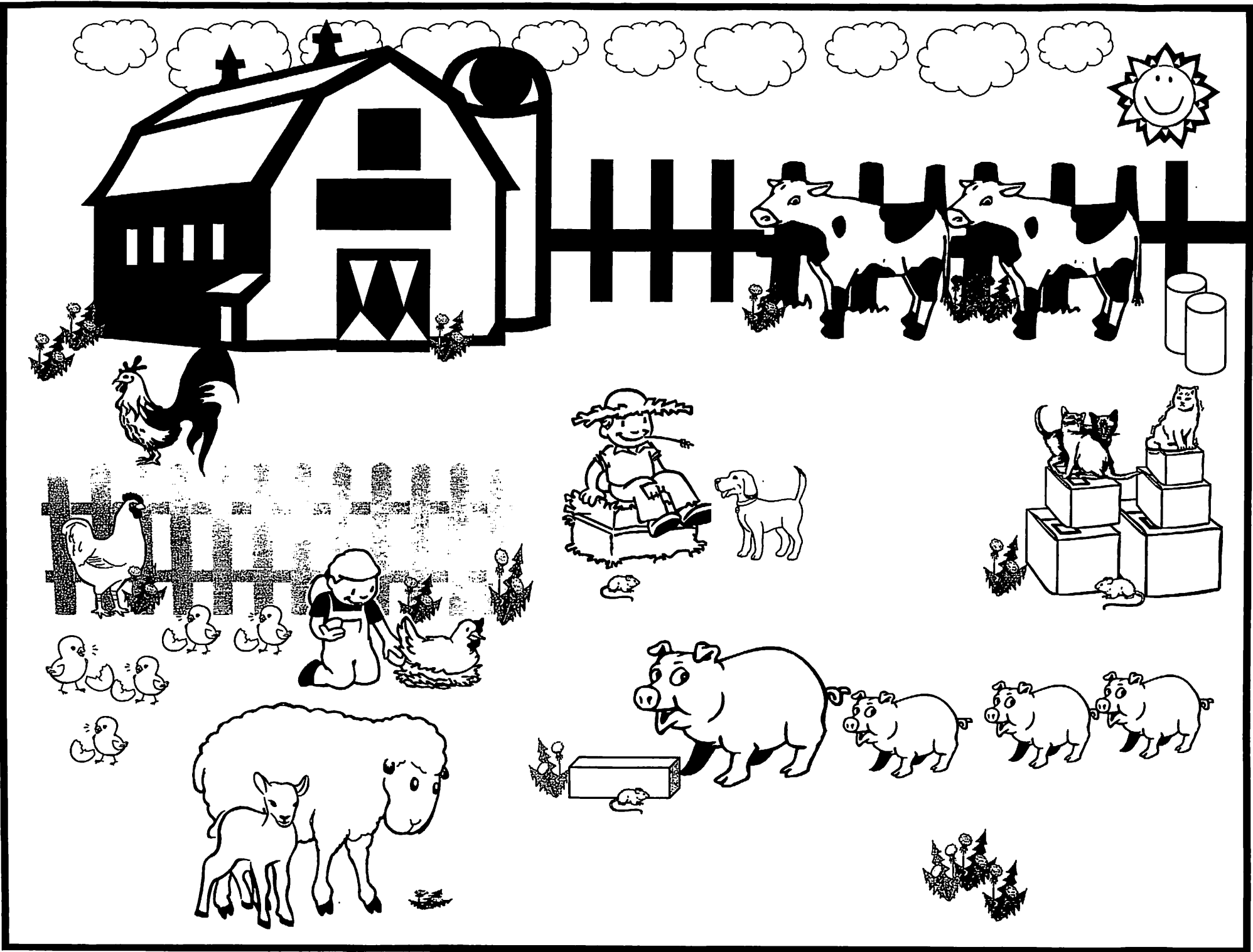
- How many cows are in the picture?
- How many cats?
- How many chickens?
- How many are hens?
- How many are roosters?
- How many chicks have hatched?
- How many nests?
- What is on top of the fence?
- What is beside the top fence?
- How many dogs are in the picture?
- Which animals are larger than you?
- Which animal is the smallest?
- Are there more dogs or cats?
- What do you see at the top of the picture?
- What do you see in the bottom of the picture?
- What do you see in the middle of the picture?
- Do you see any shapes? (triangles, circles, squares or rectangles)
- Do you see any patterns with the shapes?
- Do you see any other patterns?
- What animals have two legs?
- What animals have four legs?

Look & Talk

Still More Questions:

- Which stack of boxes has the most?
- Which box is the largest?
- Which box is in the middle?
- How many cows are in the picture?
- Where is the first pig?
- Where is the second pig?
- Where is the fourth pig?
- How many girls do you see?
- How many boys do you see?
- How many children are there all together?
- How many baby animals do you see?
- How many cubes do you see?
- How many cylinders do you see?
- What shapes do you see on the barn?
- How many triangles? Squares?
- Rectangles? Circles?
- What animal has the most?
- What animal has the least?

Use this same format for conversations using other pictures from magazines, cards, or calendars.





Today's number is

Tally marks

One more is

One less is

Ten more is

Ten less is

Hundreds	Tens	Ones

Expanded Form:

Regroup and Make a Trade

**If it's 1 to 9,
I'm doing fine,
But when it comes to one more,
collect them,
pack them,
trade for a ten,
and shelf them next door!**

tens	ones

5 5 5 5

beans

stickers

five

five

stamps

noodles

letters

seeds

holes

Roll it! Show it! Trace it!

Name _____

1	2	3	4	5	6	7	8
1	2	3	4	5	6	7	8

Name _____

Circle the name of the winner.

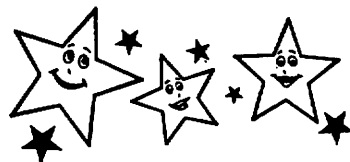
Reach for the Stars!

Player 2 _____



11	10	9	8	7	6	5	4
★	★	★	★	★	★	★	★
11	10	9	8	7	6	5	4

Reach for the Stars!



Player 1 _____