

Girls and Boys

TREND

Approach: One to one

Level: Year 4

Focus: Solving number problems using physical objects.

Resources: Two cue cards, 5 tens rods, 15 ones cubes, recording book.

Questions/instructions:



Room 1
26 children

Show cue card 1: Room 1 – 26 children

Room 1 at Tupai School has 26 children.

Place 5 rods and 15 cubes in front of the student.

1. Can you show me 26 using these rods and cubes?

arranged 2 tens rods and 6 ones cubes

% responses
2001 ('97)
year 4

92 (89)

2. Is it possible that there could be the same number of girls as boys in that class?

yes, initially

70 (63)

PROMPT: If the student says "no", ask why?

yes

8 (10)

3. Use the rods and cubes to show me how many boys and how many girls there would be in Room 1 if there was the same number of girls as boys.

PROMPT: You could use two of the tens rods and six of the ones cubes.

**arranged 2 groups of
1 tens rod and 3 ones cubes**

79 (76)

4. Now tell me how many girls there are, and how many boys there are.

13 80 (73)

Put all of the rods and cubes back together.



Room 2
32 children

Show cue card 2:

Room 2 – 32 children.

Room 2 at Tupai School has 32 children.

5. Can you show me 32 using the rods and cubes?

**arranged 3 tens rods and
2 ones cubes**

91 (88)

arranged 2 tens rods and 12 ones cubes

3 (4)

6. Could there be the same number of girls as boys in that class?

yes, initially

56 (49)

PROMPT: If the student says "no", ask why?

yes

6 (8)

7. Use the rods and cubes to show me how many girls and how many boys there would be in Room 2 if there was the same number of girls as boys.

**arranged 2 groups of 1 tens rod and
6 ones cubes**

55 (43)

8. Now tell me how many girls there are, and how many boys there are.

16 61 (46)

Commentary

The year 4 students enjoyed high success with this task until they were required to rename from tens to ones in part 7. The 2001 students had a small but consistent advantage over the 1997 students in parts 1 to 6, and a larger advantage in parts 7 and 8.