

Students, Count Off!! (B)

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Possible Solution Strategy

Clue 1: # of students is odd

Clue 2: # of students must be one less than multiple of 5

Clue 3: Since multiples of 5 end in "0" or "5", then # of students must end in "4" or "9".

Clues 1/3: # of students must end in "9"

Students, Count Off!!

Possible Solution Strategy cont...

Numbers that end in "9"	Remainder is 1 when # is $\div 2$	Remainder is 2 when # is $\div 3$	Remainder is 1 when # is $\div 4$
29	Yes	Yes	Yes
39	Yes	No	Yes
49	Yes	No	Yes
59	Yes	Yes	Yes
69	Yes	No	Yes
79	Yes	No	Yes
89	Yes	Yes	Yes
99	Yes	No	Yes
109	Yes	No	Yes
119	Yes	Yes	Yes

The pattern leads us to the following answer:
29, 59, 89, 119, 149, 179, 209, 239, 269, or 299 children