

Publisher Questions to Western and Northern Canadian Protocol (WNCP) Mathematics Team

Grade 3

1. Grade 3, Number: skip counting using coins

Since children also did some skip counting (to 100) in Grade 2, with coins of matching denomination, can we interpret that a new level of thinking at Grade 3 is in skip counting for mixed sets of coins, as well as counting beyond 100? This also incorporates the idea of skip counting from a variety of starting points (but they may not always be multiples of the skip counting pattern). For example, is it acceptable for students to have 1 quarter, 5 dimes, 10 nickels, and use skip counting to determine the value as 25, 35, 45, . . .75, 80, 90, . . . 125

WNCP Response: Yes, this is acceptable as long as it doesn't get too complicated. It should be noted that students may count the coins in a variety of ways. For example, they may take two nickels at once and continue to count by tens. Many possible answers should be noted in the TG.

2. This raises a related question: at Grade 3, when students are working with coins to skip count, is it acceptable to use the \$X.YY notation for money, or would this be considered use of decimal notation? We've been interpreting that decimal notation is not acceptable at Grade 3, even in the specialized use of describing money amounts, but during our review process we've heard requests for showing dollar-and-cent amounts using money notation (the rationale being, that this is the most practical and most realistic way that children might see money used outside the classroom).

WNCP Response: The dollar symbol can be used when there are full dollars such as \$5 or \$10 but should not be used for partial dollars such as \$1.25 since students do not work with decimals until grade 4.

Grade 9

1. In Grade 9, Number SO 1 and 2 restrict powers to integral bases only. The response to an earlier question to WNCP (posted July 18, 2007) regarding Number SO 4 indicated that the order of operations, including exponents, should be conducted with rational numbers. Is it acceptable to have students evaluate a power such as 1.24^3 using technology?

WNCP Response: WNCP Response: It is acceptable to have students evaluate such a power as long as it is embedded in a problem and students are allowed to use technology to do the calculation. Numerous questions such as this one that are not embedded in a context would not be acceptable.