

## Number Cruncher Software

This Quick Reference provides an overview of Number Cruncher software, an interactive application that reinforces students' basic arithmetic skills. The software is specifically designed for use on a SMART Board™ interactive whiteboard and is available free of charge at <http://www.edcompass.com/en/learning/softResources/cruncher.aspx>.

### Starting a Game

- 1 Launch Number Cruncher software by double-clicking on its desktop icon or selecting **Start > Programs > SMART Number Cruncher**.



The game interface and Setup dialog box will appear. The Setup dialog box indicates the type, difficulty and number of questions in a game.

*Select type of questions.* →

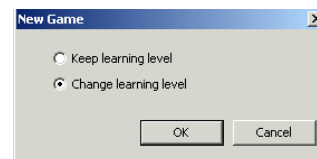
*Move sliders to increase or decrease the difficulty of questions.* →

*Select number of questions.* →

*Press for advanced settings and examples of questions at each learning level.* →

- 2 Choose addition, subtraction, multiplication or division questions by selecting the check box beside the appropriate symbol
- 3 Select the difficulty of the questions by using the slider beside each symbol. Press the **Advanced** button to see examples of questions at each learning level or to customize game settings.
- 4 Select the number of questions in the game (from 10 to 50) by using the **Number of Questions** drop-down menu
- 5 Press the **OK** button

After students have finished a game, they can start another one by pressing the **Go** button at the bottom of the interface. The New Game dialog box will appear, giving students the option of changing the game settings or playing a game with the current settings.



### Playing a Game

Students play by writing their answers in the spaces provided with their finger or a pen from the SMART Pen Tray. For addition and subtraction questions, students can use manipulatives (movable visual aids representing numbers) to help solve the problem. Players go to the next question by pressing the forward arrow. Number Cruncher software automatically totals the number of correct answers at the end of the game.

*Students can use the blank area of the interface to show their work* →

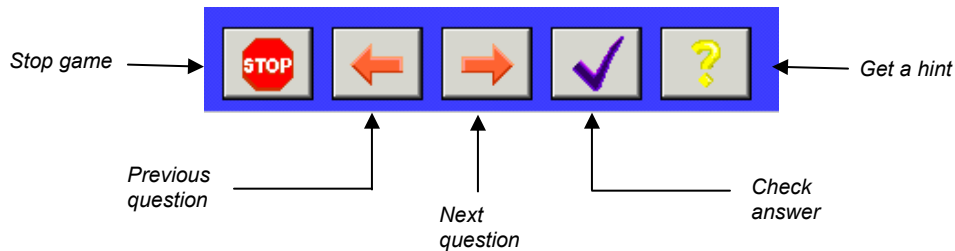
*Students can use movable visual aids to help solve the problem.* →

*Player options* →

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## Player Options

The toolbar at the bottom of the interface give students several options to control how they play the game. Players can move to the next question, return to the previous question to change their answer or get a hint. They can also check their answer by pressing the checkmark button – correct answers will be colored blue, while incorrect answers will be red.



## Customizing Game Settings

Questions can be customized to meet the specific learning needs of students. You can do any of the following:

- Allow or disallow numbers with decimals
- Allow or disallow questions that require borrowing or carrying
- Choose between a vertical or horizontal question layout
- Choose between a solve-the-equation ( $8 + 4 = ?$ ) or an identify-the-missing-number ( $8 + ? = 12$ ) question style

To customize settings when you launch Number Cruncher software, press the **Advanced** button in the Setup dialog box.

