Mystery Pixel Art Starter Pack: Addition and Subtraction: teacher notes

6 mystery pictures for practicing addition and subtraction facts within 20. Students type each answer in Google Sheets or Excel, and every correct answer reveals part of a hidden picture. A wrong answer turns light red and reveals nothing, so the sheet checks itself.

What's inside

1. Apple: addition, 8 questions, 16 by 16 squares.
2. Pear: addition, 8 questions, 16 by 18 squares.
3. Flower: subtraction, 8 questions, 18 by 22 squares.
4. Sailboat: subtraction, 8 questions, 17 by 16 squares.
5. Rocket: addition and subtraction, 8 questions, 16 by 22 squares.
6. Heart: addition and subtraction, 8 questions, 16 by 16 squares.

For each picture: a mystery file (.xlsx) for Google Sheets or Excel with a hidden answer key and its own teacher notes, and a one-page color-by-number sheet to print. Plus one answer key with every answer and finished picture.

Standards

Common Core 1.OA.C.6 (add and subtract within 20) and 2.OA.B.2 (fluently add and subtract within 20).

Use it with Google Classroom

1. Upload the .xlsx file to Google Drive and open it with Google Sheets (or File > Save as Google Sheets).
2. In Google Classroom, click Classwork > Create > Assignment.
3. Click Add (the Google Drive icon), choose the sheet, then set it to "Make a copy for each student".
4. Assign it. Each student gets their own copy to fill in.

Use it in Excel or Microsoft Teams

Share the .xlsx file as an assignment, or save a copy per student in OneDrive. Excel for the web works too.

Time needed

Plan about 10 to 20 minutes per picture. Students who are new to spreadsheets may need a few minutes more for the first one.

Differentiation

– Start with the two addition pictures, then subtraction, then the two mixed pictures.

– Students who are not ready for the spreadsheet can use the color-by-number sheet of the same picture.

– Pair students: one reads the question, the other types the answer, then swap.

– For more practice or other skills, make your own mystery pictures with the free spreadsheet pixel art maker (any picture, your own questions).

Good to know

The answers are on a sheet named Key, which is hidden, not locked. Anyone can unhide it, so use the pack for practice and fun, not for tests or grades.

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