At-Home Activities from *Investigations 3*

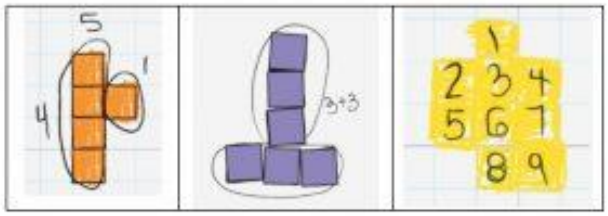
Today's Number: Part 2

Today's Number develops number sense and computational fluency across the grades. In this activity students find and record ways to make a given number, sometimes using specific constraints. These additional variations focus on different mathematics.

Kindergarten: Tile Arrangements

Use 6 tiles to make an arrangement. (You can color and cut tiles from grid paper, or color tile arrangements on the sheet. Or, use digital square tiles.) Rule: Tiles must share whole sides. For example:

Look at your arrangement. Use numbers to describe it. For example:



Try More

- Find many different ways to arrange and describe 6 tiles.
- Repeat the activity with a different number of tiles.

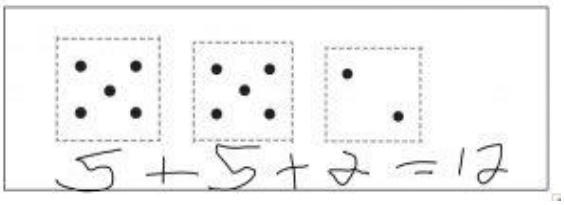
Resources

MWI: Arranging 5 Tiles

(CCSS: K.CC.A.3, K.CC.B.4a, K.CC.B.4b, K.CC.B.4c, K.CC.B.5, K.OA.A.3, K.G.A.1, K.G.B.6)

Grade 1 Dot Addition

Today's Number is 12. Use Dot Addition Cards to find ways to make 12. Record the ways you find. For example:



How do you know this equals 12? What do you know about 12 that helped you decide what numbers to use?

Try More

- Try to use one solution to find another. (*I see you have 5+5+2. Can you use what you know about 5 to make another way?*)
- How many different ways can you find to make 12 with Dot Addition Cards? (*Do you think you found all the ways? How do you know? … Is 5+5+2 and 5+2+5 the same or different? Why do you think so?*)
- Find ways to make 12 that use any numbers. You can use addition and/or subtraction.

Resources

Online Games: Dot Addition in U3, in U5
MWI: Today's Number

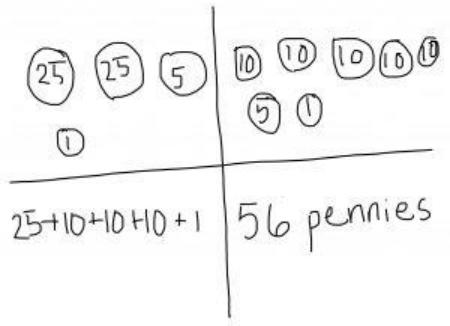
(CCSS: 1.OA.B.3, 1.OA.C.6)

Today's Number: Part 2

Today's Number develops number sense and computational fluency across the grades. In this activity students find and record ways to make a given number, sometimes using specific constraints. These additional variations focus on different mathematics.

Grade 2: Today's Number with Coins

Today's Number is 56. Find ways to make 56 using pennies, nickels, dimes and quarters. Record the ways you find. For example:



How do you know this equals 56? What do you know about 56 that helped you decide which coins to use?

Try More

- Ask: "Did/can you use one solution to find another?" For example, "I see you have 2 quarters and 6 pennies. Could you trade in those quarters for other coins to come up with another way to make 56?"
- Repeat the activity with another number between 30-100.

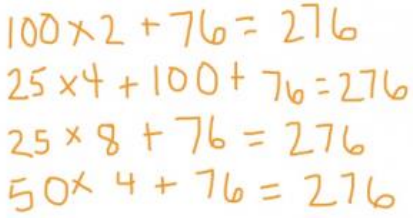
Resources

MWI: Money

(CCSS: 2.NBT.B.5, 2.MD.C.8)

Grade 3: Today's Number

Today's Number is 276. Find ways to make 276 using multiplication and addition. For example:



How do you know this one equals 276? What do you know about 276 that helped you decide what numbers to use?

Try More

- Repeat but use multiples of 100 and subtraction. E.g., for 276: 300 – 20– 4 = 276
- Repeat but use a combination of 100 in each expression. E.g. for 276: 60 + 40 + 70 + 30 + 76 = 276
- Repeat but use addition, subtraction, or both. E.g., for 276: 150 + 150 – 50 + 26 = 276
- Repeat the activity with another number between 100-1,000.

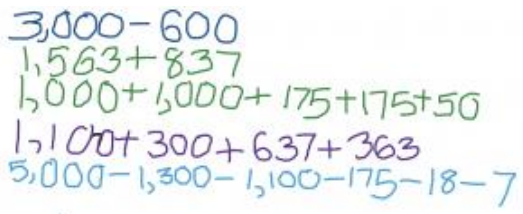
(CCSS: 3.OA.C.7, 3.NBT.A.2)

Today's Number: Part 2

Today's Number develops number sense and computational fluency across the grades. In this activity students find and record ways to make a given number, sometimes using specific constraints. These additional variations focus on different mathematics.

Grade 4: Broken Calculator

Today's Number is 2,400. Imagine using a calculator, but the 2 and 4 keys are broken. Find at least 5 ways to make the calculator display 2,400 using either addition or subtraction. Remember you can't use 2 or 4 in your expressions! For example:



How do you know these expressions equal 2,400? What do you know about 2,400 or what do you know about addition or subtraction that helped you decide what numbers to use?

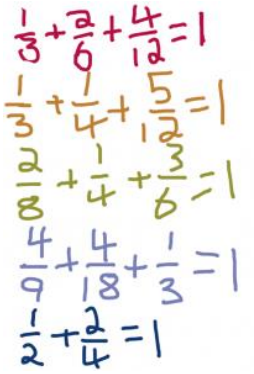
Try More

- Create 5 expressions that equal 124. Use multiplication & addition. The 1 & 2 keys are broken. E.g., (3x40)+4 and (4x6)+(4x5x5).
- Create 5 expressions that equal 998. Use only subtraction. The 1 & 9 keys are broken. E.g., 3,000–2,002 & 2,000–700–250–52.
- Choose a number between 200 and 5,000. Choose which operation(s) need to be used. Choose which keys are broken. Try to make it challenging!

(CCSS: 4.NBT.B.4 and 4.NBT.B.5)

Grade 5: Today's Number: Fractions

Today's Number is 1. Find 5 ways to make 1 using fractions and only using addition. Do not use a denominator more than once in an equation. For example:



How do you know these expressions equal 1? How did you decide which fractions to use?

Try More

- Use the same constraints but with a different whole number (e.g. 5), a fraction (e.g. 1/2) or a mixed number (e.g. 2 1/2) as Today's Number.
- Instead of using only addition, use only subtraction. Or, use both addition and subtraction. For example: Create 5 expressions that equal 2 1/2 using only subtraction in each expression. Do not use a denominator more than once. E.g.: 2 3/4 – 2/8 = 2 1/2 and 3 10/12 – 1/2 – 2/3 – 1/6 = 2 1/2.

(CCSS: 5.NF.A.1)