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| **Perfecting the Practices**Melissa Garber and Bruce GunnJordan School District Elementary Math Specialistselemmath.jordandistrict.orgHandouts can be found at the above website under the Professional Development tab UCTM link |
| **Sample Procedure Questions** | **Sample Content and Practice Questions** |
| (2nd) Mila turned over two dot cards. There were 20 dots. The first dot card had 8 dots. How many dots did the other card have? | (1st-2nd) Mila turned over three dot cards. There were 20 dots. The first dot card had 8 dots. How many dots did the other two cards have? |
| Practices: |
| (3rd)  24 ÷ 2 = 24 ÷ 4 = 24 ÷ 6 = 24 ÷ 8 = | (1st-3rd) There are some creatures in a cave. There are 24 legs. What creatures could be in the cave?  |
| Practices: |
| (4th)  29 x 12 | (4th – 5th) Trevor wants to multiply 29 and 12 . What advice would you give Trevor? |
| Practices: |
| (5th)  $\frac{10}{15}$ = $\frac{}{}$ | (5th – 6th) Terry says $\frac{10}{15} $and $\frac{6}{9}$ are the same. Lynn says they are different who is correct and why? |
| Practices: |

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_

Partners of Ten

Can you find six partners of ten?

 Proof Pictures

10 = \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_

10 = \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_

10 = \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_

10 = \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_

10 = \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_

10 = \_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_

Choose your favorite ten fact and write a word problem to match the equation.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_

Make a Balanced Meal

1. Choose 5 food cards to make a meal.

2. Estimate the total number of calories in the meal.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Round the calories on each food card to the nearest ten.

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| **Name of Food** | **Calories** | **Calories Rounded to the nearest ten** |
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|  |  |  |
|  |  |  |

4. How many calories in the total meal. \_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Compare your estimate. Write an equation and solve to show the difference.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Adaptations:

1 -- Compare your meal with another group.

2 -- Swap out two food items to reduce the number of calories.

3 -- Make two meals:

One meal with the highest number of calories, another

meal with the fewest number of calories. How are the

meals alike? How are the meals different.

4 -- Plan your meals for the day. Breakfast, lunch, and dinner with two snacks. Don’t go over 2,000 calories.

5 -- Keep a food diary and record the number of calories you eat in one day.

6 -- Compare school lunches. How many calories are in the most popular school lunches.

7 -- Ask students to bring in their own nutrition labels. And create their own word problems. Using labels from home.

8 -- Use a computer based tracker such as my fitness pal or daily burn to find the number of calories in different food items.

9 -- Incorporate measurement and data domains. Make graphs, record weights.

• Food Model Cards are available at: <https://utah.agclassroom.org/> (search food models)

• Cut out pictures from grocery shopping ads.

• Bring in food cartons, labels, cans from home.

• Check with district nutrition services for lists of nutrition information

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_

Coupon Shopping\*

Sam is excited about buying some holiday gifts. He has three coupons from his favorite store. He wants to buy a video game that costs $40 and a TV series on DVD that costs $60.

• 20 percent off the total of any purchase

• 25 percent off any one item purchased

• $7.00 cash back on every $25.00 spent

1 – How should Sam use the coupons to save the most money, and why?

2- What would be the best way for Sam to use his coupons if he is allowed to present only one coupon per visit?

3- List the different ways he could use his coupons. Explain how you came up with these combinations.

4 Is it better for Richard to buy both items separately or at the same time? Why?

5. What method of using his coupons gives him the lowest price to pay? Explain your thinking.

6. What method of using his coupons gives him the highest price to pay? Explain your thinking?

7. What is Sam’s discount if he gets $7.00 cash back on every $25.00 he spends?

\*adapted from Problem Solvers activity *Teaching Children Mathematics* August 2012

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| --- |
| 20% offthe total purchase |
|   |
| 25% offany one item purchased |
|   |
| $7.00 cash backon every $25.00 spent |

**AGENDA**

5:00 **Content vs. Practice Conversation**

--Introductions

--Quick explanation of what we are doing in Jordan

--Introduce Math Practice posters and explain where to get the handouts.

5:10 **Primary task:**

**Content I Can**: I can find partners of 10. (K.OA.3, 1.OA.3)

**Practice Standard**: 2 Reason abstractly and quantitatively, 5 Use appropriate tools strategically, 7 Look for and make use of structure

**Making Tens activity** (adaptation from activity found on www.k-5mathteachingresources.com)

5:20 **Middle elementary grade task:**

**Content I Can**: I can round numbers to the nearest ten and hundred. I can use efficient strategies to add and subtract large numbers. (3.NBT.1 and 2, 4.NBT.3 and 4)

**Practice Standard**: 4 Model with mathematics, 6 attend to precision, 8 Look for and express regularity in repeated reasoning

**Make a Meal activity** (adaptation from 2nd grade 2004 core academy activity)

5: 30 **Upper elementary grade task:**

**Content I Can**: I can find a percent of quantity as a rate per 100. (6.RP.3c)

**Practice Standard**: 1 Make sense of problems and persevere in solving them, 3 Construct viable arguments and critique the reasoning of others.

**Coupon Shopping activity** (adaptation from *Teaching Children Mathematics* August 2012 problem solvers page 8-11)

5: 40 **Perfecting the Practices:** In groups of 4 or 5, Examine the sample tasks and identify the different practice standards that emerge as students complete the task. What is it about the task that helps students engage with the practice standards?

5:50 **Finish and dismiss**