Learn at Home Resource Packet – General Overview
Grade 1

This New York State Next Generation Mathematics Learning Standards aligned packet of resources is designed for students and their parents who wish to support in-school learning with activities that can be done independently and/or with a partner at home. The packet includes five activities that support the major mathematical work of the grade with a particular focus on building grade level numeracy. In grade 1, students' ability to fluently add and subtract numbers within 10 is required as it supports their ability to engage conceptually with important content of the year. These activities should each take 40-60 minutes (although many can be extended) and may be completed in any order.

How to use this guide - For each activity, you will find:
- information about the standards both content and practice that the activity supports;
- a description and/or instructions for the activity;
- materials required;
- one or more focus or discussion questions that will help deepen the learning of the activity;
- and suggestions for extending or adjusting the activity.

Activity A:
$20 Dot Map

Next Generation Mathematics Learning Standard (s)
Add and subtract within 20
NY-1.OA.6a
Add and subtract within 20. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating the known equivalent but easier or known sums.

Mathematical Practice(s):
MP1:   Make sense of problems and persevere in solving them.
MP4:   Model with Mathematics

Materials:
- $20 Dot Map Task
- pencil and paper

Description
The task shows a map. You must get from start to finish by visiting three of the dots, at each dot you have to pay the specified number of dollars. If you have $20 can you get from start to finish and visit three dots?

Questions for parents to ask while playing
How do you know that you have spent $20?
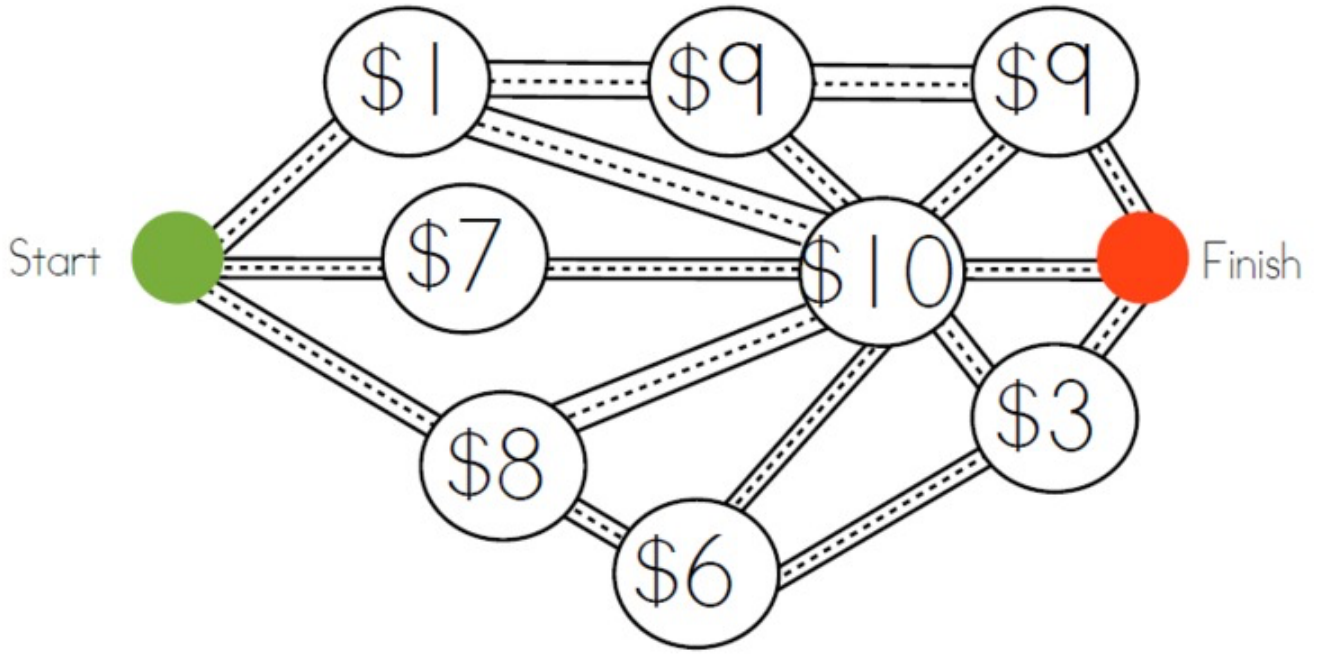Can you find a way to get from start to finish and spend all $20?

Extension
How many different ways can you find from start to finish that go to three dots and cost $20?
Can you find a way to get from start to finish and spend less than $20?

Task adapted from: http://tasks.illustrativemathematics.org/content-standards/1/OA/C/6/tasks/1084

$20 Dot Map

Activity B:
20 Tickets

Next Generation Mathematics Learning Standard (s)
Represent and solve problems involving addition and subtraction
NY-1.OA1
Use addition and subtraction within 20 to solve one and two step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.

Mathematical Practice(s):
MP1:   Make sense of problems and persevere in solving them.
MP4: Model with Mathematics

Materials
- 20 Ticket Task
- Paper and pencil

Description
The purpose of the task is for students to add and subtract within 20. There are multiple solutions, and each pair of students should find more than one.

Questions for parents to ask your child
- Can you show your solution in a different way.

Extension
Have your child find different solutions to spend the tickets.
Give them a different amount of money to spend at the fair.
Ask them which way they would rather use and why?

Task taken from: http://tasks.illustrativemathematics.org/content-standards/1/OA/A/1/tasks/1152

20 Tickets

Bo bought 20 tickets to play games at Family Fun Night at his school. He wants to play each game at least once. He needs to use all of his tickets. How many times might he play each game? Find at least two ways he can do it.

Game	Number of Tickets Needed
Ring Toss	1
Putt-Putt Golf	2
Soccer Kick	3
Moonwalk	5

Activity C:
Finding a Chair

Next Generation Mathematics Learning Standard (s)
Represent and solve problems involving addition and subtraction
NY-1.OA1
Use addition and subtraction within 20 to solve one and two step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.

Mathematical Practice(s):
MP1: Make sense of problems and persevere in solving them.
MP2: Reason abstractly and quantitatively.

Materials
- Finding a Chair task
- Paper and pencil

Description
These tasks types represent Compare contexts for addition and subtraction

Questions for parents to ask your child
- Which problem(s) did you think were the hardest to solve? Why?

Extension
Have your child make up their own problems using a different number but the same situation.

Task taken from: http://tasks.illustrativemathematics.org/content-standards/1/OA/A/1/tasks/194

Finding a Chair

a. There are 8 children and 6 chairs. A child sits in each chair. How many children won't have a chair?

b. There are 8 children and some chairs. A child sits in each chair. 2 children don't have a chair. How many chairs are there?

c. There are some children and 6 chairs. A child sits in each chair. 2 children don't have a chair. How many children are there?

d. There are 8 children and 10 chairs. A child sits in each chair. How many empty chairs are there?

e. There are 8 children and some chairs. A child sits in each chair. Two chairs are empty. How many chairs are there?

f. There are some children and 10 chairs. A child sits in each chair. Two chairs are empty. How many children are there?

Activity D:
Maria's Marbles

Next Generation Mathematics Learning Standard (s)
Represent and solve problems involving addition and subtraction
NY-1.OA1
Use addition and subtraction within 20 to solve one and two step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.

Mathematical Practice(s):
MP1:   Make sense of problems and persevere in solving them.
MP2: Reason abstractly and quantitatively.

Materials
- Subtraction word problem directions and cards.
- Paper and pencil

Description
These problems represent the compare contexts for addition and subtraction. Each of these problem types can be solved using addition or subtraction, although the language in specific problems tends to favor one approach over another.

Questions for parents to ask your child
- Which problem(s) did you think were the hardest to solve? Why?
- Can you show me another way to solve the problem?

Extension
Have your child create their own compare problem, using the same or different numbers.

Task taken from: http://tasks.illustrativemathematics.org/content-standards/1/OA/A/1/tasks/162

Maria's Marbles

a. Ali had 9 marbles. Maria had 5 marbles. How many more marbles did Ali have than Maria? Ali had 9 marbles. Maria had 5 marbles. How many fewer marbles did Maria have than Ali?

b. Ali had 4 more marbles than Maria. Maria had 5 marbles. How many marbles did Ali have? Maria had 4 fewer marbles than Ali. Maria had 5 marbles. How many marbles did Ali have?

c. Ali had 4 more marbles than Maria. Ali had 9 marbles. How many marbles did Maria have? Maria had 4 fewer marbles than Ali. Ali had 9 marbles. How many marbles did Maria have?

Activity E:

Sharing Markers

Next Generation Mathematics Learning Standard (s)
Represent and solve problems involving addition and subtraction
NY-1.OA1
Use addition and subtraction within 20 to solve one and two step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions.

Mathematical Practice(s):
MP1: Make sense of problems and persevere in solving them.
MP2: Reason abstractly and quantitatively.

Materials
- Subtraction word problem directions and cards.
- Paper and pencil

Description
These tasks types represent the Take From contexts for addition and subtraction. This task includes the three different problem types using the Take From context: result unknown, change unknown, and start unknown. Students need experience and practice with all three types.

Questions for parents to ask your child
- Which problem(s) did you think were the hardest to solve? Why?
- Can you show me another way to solve one of the card problems?

Extension
Have your child create their own problems, using the same or different numbers.

Task adapted from: http://tasks.illustrativemathematics.org/content-standards/1/OA/A/1/tasks/163

Sharing Markers

a. Char had 10 markers. She gave 3 to a friend. How many did she have left?

b. Char had 10 markers. She gave some to a friend. Now she has 7 left. How many markers did she give to her friend?

c. Char had some markers. She gave 3 to a friend. Then she had 7 left. How many markers did she have to start with?