## **HORIZONS MATH 2 MANIPULATIVES SCHEDULE**

This schedule will help you stay organized as you work your way through the Horizons Math 2 Manipulatives kit. To use it most effectively, be sure to check the "Parent Provided" column each time you begin a lesson to make certain you have all the materials required. Please also note that "optional" manipulatives are listed in *italic font* in your Teacher's Guide.

The Number Chart is referenced in nearly every lesson from Lesson 1 forward. This can be found in the Worksheet section of your Teacher's Manual (Worksheet #1). Keep a master copy ... then laminate the Number Chart to increase its longevity.

Additionally, a handful of lessons contain projects that require poster board. You may or may not choose to include these in your planning. They are not required for teaching the concepts presented. Also, be sure to check the *Teaching Tips* in Lesson 5 for creating your own place value manipulatives.

Finally, please refer to the Flash Cards Instruction Sheet each time you see a reference to *Plain index cards to create* \_\_\_\_\_\_\_flash cards. This is included at the end of the schedule.

**Note:** Lesson 21 includes an optional activity for students to create their own clock. You will need a paper plate and a brad, in addition to a sheet of construction paper included in your kit.

Lesson	Kit/Book Provided	Parent Provided
1	Number chart, Ordinal number flash cards	Poster board
2	Number chart, Ordinal number flash cards	
3	Addition flash cards, Ordinal number flash cards, Number chart, Plain index cards to create <i>Tally</i> <i>Marks flash cards</i> .	
4	Number chart, Addition flash cards, Ordinal number flash cards	Student-created tally marks flash cards
5	Addition flash cards, Ordinal number flash cards, Number chart	Student-created tally marks flash cards, Place value materials
6	Addition flash cards, Number chart	Student-created tally marks flash cards, Place value materials
7	Addition flash cards, Number chart	Student-created tally marks flash cards, Place value materials
8	Addition flash cards, Number chart	
9	Addition flash cards, Number chart	
10	Addition flash cards, Number chart	Poster board
11		
12	Number chart	Place value materials

Lesson	Kit/Book Provided	Parent Provided
13	Number chart	Place value materials
14	Number chart	Place value materials
15	Addition flash cards, Number chart	
16	Subtraction flash cards, Number chart	
17	Subtraction flash cards, Number chart	
18	Subtraction flash cards, Number chart, Clock	
19	Subtraction flash cards, Number chart, Clock	
20	Addition flash cards, Sub- traction flash cards, Clock	
21	Subtraction flash cards, Number flash cards <sup>1</sup> , Clock, Construction paper	Paper plate, Brad
22	Subtraction flash cards, Clock, Number chart	Place value materials
23	Number chart, Subtrac- tion flash cards, Clock, Plain index cards to create equal and not equal flash cards	Student-created tally marks flash cards
24	Number chart, Subtrac- tion flash cards, Number flash cards, Clock	
25	Addition flash cards, Subtraction flash cards, Number flash cards, Number chart, Clock	
26	Subtraction flash cards, Number flash cards, Clock, Number chart	Place value materials
27	Subtraction flash cards, Number chart, Clock	Place value materials
28	Number chart, Subtrac- tion flash cards, Ordinal number flash cards, Clock	Place value materials
29	Number chart, Subtrac- tion flash cards, Ordinal number flash cards	
30	Addition flash cards, Subtraction flash cards, Number chart	

1 For word number drills simply use the back side of your Number flash cards to drill word numbers.

Lesson	Kit/Book Provided	Parent Provided
31	Subtraction flash cards, Number flash cards, Number chart	Place value materials
32	Addition flash cards, Num- ber flash cards, Number charts (both) <sup>2</sup> , Yardstick	
33	Number chart, Subtraction flash cards	Place value materials
34	Number chart, Addition flash cards	Place value materials
35	Addition flash cards, Subtraction flash cards, Number chart	Place value materials
36	Subtraction flash cards, Number chart	Place value materials
37	Addition flash cards, Number chart	Place value materials
38	Number chart, Clock	Place value materials
39	Number chart, Addition flash cards, Clock	Place value materials
40	Addition flash cards, Subtraction flash cards, Number flash cards, Clock, Number chart	
41	Subtraction flash cards, Number flash cards, Number chart, Number line, Ruler <sup>3</sup>	
42	Addition flash cards, Clock, Number chart, Ruler	
43	Subtraction flash cards, Number chart, Number line, Clock, Ruler	
44	Addition flash cards, Num- ber line, Number chart, Clock, Plain index cards to create greater than and less than flash cards	Place value materials
45	Addition flash cards, Subtraction flash cards, Clock, Number chart	Place value materials
46	Subtraction flash cards, Clock	Place value materials
47	Addition flash cards, Clock	Place value materials
48	Subtraction flash cards, Clock	Place value materials
49	Addition flash cards, Number flash cards, Clock	
50	Addition flash cards, Subtraction flash cards, Number flash cards	Place value materials
51	Subtraction flash cards, Number flash cards	Place value materials

Lesson	Kit/Book Provided	Parent Provided
52	Addition flash cards, Ordinal number flash cards	Place value materials
53	Subtraction flash cards	Place value materials
54	Addition flash cards, Number chart (100-199)	Calendar, Place value materials
55	Addition flash cards, Subtraction flash cards, Number charts (both), Plain index cards to create months of the year flash cards	
56	Subtraction flash cards, Number charts (both)	
57	Addition flash cards, Number chart (100-199)	
58	Subtraction flash cards, Number chart, Ruler	
59	Addition flash cards, Number chart, Yardstick	
60	Addition flash cards, Subtraction flash cards, Counting tiles	
61	Subtraction flash cards, Multiplication flash cards, Number chart	
62	Addition flash cards, Multiplication flash cards, Number chart, Clock	
63	Subtraction flash cards, Multiplication flash cards, Addition flash cards, Number chart, Clock	Place value materials
64	Addition flash cards, Multiplication flash cards, Number chart, Clock, Multiplication chart <sup>4</sup>	
65	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Number flash cards	Place value materials
66	Subtraction flash cards, Multiplication flash cards, Multiplication chart	Place value materials
67	Addition flash cards, Multiplication flash cards, Number chart	Place value materials

2 If you do not own the 100-199 Number chart from Horizons Math 1, create your own in similar fashion to Worksheet 1.

3 The folding meter stick can be used for all activities requiring an inch or centimeter ruler, yardstick, or meter stick.

4 The multiplication chart can be found in your Teacher's Guide (Worksheet 31). Be sure to keep a master copy, then laminate a copy to increase its longevity.

Lesson	Kit/Book Provided	Parent Provided
68	Subtraction flash cards, Multiplication flash cards, Multiplication chart, Number chart	Money
69	Addition flash cards, Multiplication flash cards, Multiplication chart	Calendar, Money
70	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Multiplication chart, Yardstick	Calendar
71	Subtraction flash cards, Multiplication flash cards, Ruler, Counting tiles	Money, Calendar
72	Addition flash cards, Multiplication flash cards, Clock, Multiplication chart	
73	Subtraction flash cards, Multiplication flash cards, Clock	Calendar
74	Addition flash cards, Multiplication flash cards, Clock, Number chart	Calendar, Money
75	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Clock	Money (half dollar)
76	Subtraction flash cards, Multiplication flash cards, Number flash cards, Clock, Number charts (both)	Money
77	Addition flash cards, Multiplication flash cards, Clock, Number charts (both)	
78	Multiplication flash cards, Subtraction flash cards	
79	Addition flash cards, Multiplication flash cards, Multiplication chart	
80	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Multiplication chart	
81	Subtraction flash cards, Multiplication flash cards	
82	Addition flash cards, Multiplication flash cards, Multiplication chart	Fraction materials⁵, Money
83	Subtraction flash cards, Multiplication flash cards	Money, Fraction materials
84	Addition flash cards, Multiplication flash cards	Money, Fraction materials

Lesson	Kit/Book Provided	Parent Provided
85	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Number chart, Plain index cards to create <i>time</i> <i>equivalent flash card</i>	Money, Fraction materials
86	Subtraction flash cards, Multiplication flash cards, Multiplication chart, Counting tiles	Student-created time equivalent flash cards
87	Addition flash cards, Multiplication flash cards	Student-created time equivalent flash cards, Money (one, five, ten, and twenty dollar bills)
88	Subtraction flash cards, Multiplication flash cards, Clock	Money, Place value materials
89	Addition flash cards, Multi- plication flash cards, Clock	Fraction materials
90	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Clock	Money, Fraction materials
91	Subtraction flash cards, Multiplication flash cards, Addition flash cards, Multiplication chart, Counting tiles	Fraction materials, Place value materials
92	Addition flash cards, Multiplication flash cards	Money, Place value materials
93	Subtraction flash cards, Multiplication flash cards, Roman numeral flash cards, Plain index cards to create shapes flash cards	
94	Addition flash cards, Multi- plication flash cards, Ro- man numeral flash cards	Money, Student- created shapes flash cards
95	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Roman numeral flash cards	Money, Student- created shapes flash cards
96	Subtraction flash cards, Multiplication flash cards, Roman numeral flash cards, Multiplication chart	Student-created shapes flash cards, Place value materials
97	Addition flash cards, Multiplication flash cards, Multiplication chart	Student-created shapes flash cards, Place value materials

<sup>5</sup> You can create your own fraction materials—trace around a small dinner plate on a piece of construction paper. Cut out the shape and divide it in to 4 equal parts. Create as many fraction "pies" as you need to demonstrate the fraction parts taught in various lessons.

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**Note:** Lesson 127 makes use of a 5 pound bag of flour and 1 pound of butter.

Lesson	Kit/Book Provided	Parent Provided
98	Subtraction flash cards, Multiplication flash cards, Counting tiles	Student-created shapes flash cards, Dictionary
99	Addition flash cards, Multiplication flash cards, Multiplication chart	Student-created shapes flash cards, Bar graph <sup>6</sup> , Poster board
100	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Multiplication chart	Place value materials
101	Subtraction flash cards, Multiplication flash cards, Multiplication chart, Clock	
102	Addition flash cards, Multiplication flash cards, Multiplication chart, Clock	
103	Subtraction flash cards, Multiplication flash cards, Multiplication chart, Clock	Fraction materials
104	Addition flash cards, Multiplication flash cards	Fraction materials
105	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Multiplication chart	Money
106	Subtraction flash cards, Multiplication flash cards, Multiplication chart	Money
107	Addition flash cards, Multiplication flash cards	Money, Flannel board <sup>7</sup>
108	Subtraction flash cards, Multiplication flash cards, Roman numeral flash cards	Money
109	3D solids shapes, Number chart, Roman numeral flash cards	Poster board
110	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Multiplication chart, 3D solids models	
111	Subtraction flash cards, Multiplication flash cards, Multiplication chart	Student-created shapes flash cards
112	Addition flash cards, Multiplication flash cards	Student-created shapes flash cards, Place value materials
113	Subtraction flash cards, Multiplication flash cards, Number chart	Student-created shapes flash cards, Fraction materials

Lesson	Kit/Book Provided	Parent Provided
114	Addition flash cards, Multiplication flash cards, Multiplication chart, Ruler, Plain index cards to create <i>solids flash cards</i>	
115	Addition flash cards, Subtraction flash cards, Multiplication flash cards, 3D solids models, Ruler, Yardstick	Student-created solids flash cards
116	Subtraction flash cards, Multiplication flash cards, Multiplication chart, Ruler, Yardstick, 3D solids models	
117	Addition flash cards, Multiplication flash cards, Yardstick	Student-created months of the year flash cards
118	Subtraction flash cards, Multiplication flash cards, Ruler, Plain index cards to create English linear equivalent flash cards	Student-created months of the year flash cards
119	Addition flash cards, Multiplication flash cards, Multiplication chart	Money, Pencils, Erasers, Note pads
120	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Multiplication chart, Ruler	
121	Subtraction flash cards, Multiplication flash cards, Multiplication chart, Ruler, Meter stick	
122	Addition flash cards, Multiplication flash cards, Roman numeral flash cards, Multiplication chart	
123	Subtraction flash cards, Multiplication flash cards, Multiplication chart, Ruler, Meter stick	
124	Addition flash cards, Multi- plication flash cards, Clock	Student-created shapes flash cards
125	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Clock	Student-created shapes flash cards
126	Subtraction flash cards, Multiplication flash cards, Multiplication chart, Clock	Calendar, Student- created shapes flash cards

6 Create your own bar graph similar to the graph on the Student Worksheet. You may use a sheet of the graph paper provided in your manipulatives kit.

7 Some lessons call for a flannel board. Please keep in mind that this program is also designed for classroom use where a flannel board would be standard equipment.

Lesson	Kit/Book Provided	Parent Provided
127	Addition flash cards, Multiplication flash cards, 3D solids models, Counting tiles	5 pound bag of flour, 1 pound of butter
128	Subtraction flash cards, Multiplication flash cards, 3D solids models	Student-created solids flash cards
129	Addition flash cards, Multi- plication flash cards, Ruler	Pencils, Pens, Erasers
130	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Ruler, Plain index cards to create <i>days of the week</i> <i>flash cards</i>	Markers, Rulers, Books
131	Subtraction flash cards, Multiplication flash cards, Ruler	
132	Addition flash cards, Multi- plication flash cards, Ruler	Student-created days of the week flash cards
133	Subtraction flash cards, Multiplication flash cards, Ruler	Poster board
134	Addition flash cards, Multiplication flash cards, Ruler, Counting tiles	
135	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Clock, Ruler, Counting tiles	Calendar, String
136	Subtraction flash cards, Multiplication flash cards, Counting tiles	
137	Addition flash cards, Multiplication flash cards, Ruler	Parent—draw and cut out a triangle, square and hexagon from typing paper
138	Subtraction flash cards, Multiplication flash cards, Multiplication chart	Mirror, Parent— draw and cut out a rectangle, circle, and octagon from typing paper
139	Addition flash cards, Multiplication flash cards, Multiplication chart, 3D solids models	
140	Addition flash cards, Subtraction flash cards, Multiplication flash cards, 3D solids models	Student-created solids flash cards
141	Subtraction flash cards, Multiplication flash cards	Student-created time equivalents flash cards, English liquid measure containers

Lesson	Kit/Book Provided	Parent Provided
142	Addition flash cards, Multiplication flash cards, Thermometer, Ruler	English liquid measure containers
143	Subtraction flash cards, Multiplication flash cards, Thermometer	Student-created time equivalents flash cards, English liquid measure containers, Poster board
144	Addition flash cards, Multiplication flash cards, Roman numeral flash cards, Thermometer, Ruler, Plain index cards to create English liquid equivalents flash cards	
145	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Roman numeral flash cards, Number chart (100-199), Thermometer	
146	Subtraction flash cards, Multiplication flash cards, Number chart	Student-created cube (Worksheet 75), Shoe box
147	Addition flash cards, Multiplication flash cards	Student-created cubes
148	Subtraction flash cards, Multiplication flash cards	
149	Addition flash cards, Multi- plication flash cards, Ro- man numeral flash cards	
150	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Roman numeral flash cards, Construction paper	Parent—cut several shapes out of construction paper
151	Subtraction flash cards, Multiplication flash cards, 3D solids models, Plain index cards to create English weight equivalents flash cards	Student-created solids flash cards
152	Addition flash cards, Multiplication flash cards, Clock	Student-created Eng- lish weight equiva- lents, English linear equivalents, English liquid equivalents and time equivalents flash cards
153	Subtraction flash cards, Multiplication flash cards, Thermometer, Clock	
154	Addition flash cards, Multiplication flash cards, Thermometer	

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**Note:** Lesson 141 requires a gallon, quart, pint, and cup container; Lesson 146 requires a shoe box.

Lesson	Kit/Book Provided	Parent Provided
155	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Thermometer	Student-created English weight equiv- alents, English linear equivalents, English liquid equivalents and time equivalents flash cards
156	Subtraction flash cards, Multiplication flash cards, Roman numeral flash cards, 3D solids models	
157	Addition flash cards, Multiplication flash cards, Roman numeral flash cards, Graph paper	Student-created Eng- lish weight equiva- lents, English linear equivalents, English liquid equivalents and time equivalents flash cards, Poster board
158	Subtraction flash cards, Multiplication flash cards	
159	Addition flash cards, Multiplication flash cards, Thermometer, Counting tiles	
160	Addition flash cards, Subtraction flash cards, Multiplication flash cards, Thermometer	

## FLASH CARD INSTRUCTION SHEET

One very effective way to help students learn a new concept is to assist them in making their own flash cards. For most of these math flash cards, help your student to draw the "front" side of the card and you can fill in the "answer" or back side of the card.

**Note:** If you've previously used Horizons Math 1, you may already own many of these flash cards.

Lesson Introduced	Flash Cards	Instruction
3	Tally Marks	Based on the instruction in the lesson, help your student make a separate flash card for each set of tally marks. Parent fills in the appropriate number word on the back.
23	Equal/Not Equal	Help your student create two flash cards, one each with the equal and not equal signs on the front. Parent fills in the appro- priate identification on the back.
44	Greater Than/ Less Than	Help your student create two flash cards, one each with the greater than and less than signs on the front. Parent fills in the appropriate identifi- cation on the back.
55	Months of Year	Using a calendar, help your student write the name of each month on a separate index card. Parent may need to be the scribe for this set of flash cards.
85	Time Equivalents	Help your student create eight flash cards, one each with one minute, one week, one day, one hour, and one-half hour on the front, and three with one year on the front. Parent fills in the following equivalents on the back: 60 seconds, 7 days, 24 hours, 60 minutes, 30 minutes, 12 months, 365 days, and 52 weeks.

Lesson Introduced	Flash Cards	Instruction
93	Shapes	Using seven index cards, draw an oval, diamond, octagon, circle, triangle, square, and rectangle on individual cards. Allow your student to color each shape. Parent fills in the appropriate identifi- cation on the back.
114	Solids	Using four index cards, draw a sphere, a cylinder, a cube, and a cone. Allow your student to color each shape. Parent fills in the appropriate identifi- cation on the back.
118	English Linear Equivalents	Help your student create two flash cards, one each with 1 Foot and 1 Yard on the front. Parent fills in the appropriate equivalent in inches on the back.
130	Days of the Week	Using a calendar, help your student write the name of each day of the week on a separate index card. Parent may need to be the scribe for this set of flash cards.
144	English Liquid Equivalents	Parent creates five flash cards with labels ounce, cup, pint, quart, and gallon. On the back write these equivalents one cup = 8 ounces, 1 pint = 2 cups, 1 quart = 2 pints, 1 gallon = 4 quarts.
151	English Weight Equivalents	Help your student create two flash cards, one each with 1 pound and 1 ton. On the back write these equivalents 1 pound = 16 ounces, 1 ton = 2000 pounds.