


2ND EDITION
Grades 3-5



FoodMASTER

Using Food to Teach Mathematics and Science Skills

TEACHER
EDITION

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FoodMASTER

Food, Mathematics And Science Teaching Enhancement Resource Initiative

www.foodmaster.org

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*This book is dedicated in loving memory of
Beverly Wyckoff Wilson,
a fourth grade teacher,
and to all teachers that selflessly
give so much every day.*

*We wish to thank family, friends, co-workers and teachers
who have provided much love, support and feedback,
and God with whom all things are possible.*

— Melani W. Duffrin, Sharon Phillips and Jana A. Hovland

SEPA SCIENCE EDUCATION PARTNERSHIP AWARD

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The Science Education Partnership Award (SEPA) was created to improve K-12 health sciences education and to create public awareness of life sciences. SEPA brings educators, media experts, community leaders, and biomedical and behavior scientists together in partnerships to design and disseminate innovative K-12 science programs. SEPA is administered by the National Center for Research Resources, a component of the National Institutes of Health.

The Food, Mathematics, and Science Teaching Enhancement Resource (FoodMASTER) initiative received three years of SEPA-Phase I funding to develop the multimedia FoodMASTER Intermediate curriculum and to investigate its impact. Thirteen classrooms in Appalachian Ohio participated in the pilot program and four classrooms served as controls. Initial results showed promise for using food as a tool to teach mathematics and science to intermediate students. FoodMASTER was awarded SEPA-Phase II funding to prepare the curriculum for national dissemination and to continue to investigate the impact of FoodMASTER Intermediate.

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Introduction

FoodMASTER Intermediate

A food, mathematics and science activity book for grades 3-5

Background

FoodMASTER (Food, Mathematics and Science Teaching Enhancement Resource) is a compilation of programs aimed at using food as a tool to teach mathematics and science. It is our theory that if food is used as a tool to teach mathematics and science, students will be better prepared to demonstrate and apply mathematic and scientific knowledge. Because students encounter food on a daily basis, they have preexisting contextual experiences preparing them for learning new and relevant mathematics and science material.

Food is conducive to hands-on and virtual, inquiry-based, active learning that uses multiple senses to engage students in the learning process. Utilizing food allows for an interdisciplinary approach to learning concepts and ideas in a variety of scientific subjects like general science, biology, chemistry, microbiology, nutrition and health. Additionally, food labs are a dynamic way to teach mathematics concepts such as numbers and operations, algebra, geometry, measurement and problem solving.

The knowledge and skill development that can be inspired by the FoodMASTER approach is limitless. Proper use of measurement tools, data collection and interpretation, application and generalization, classification and organization, graphing and comparative analysis, understanding chemical changes, observing functions of ingredients and controlling variables, pricing, critical thinking, self-directing learning, and team building are only a few of the potential knowledge and skill development areas for intermediate grade students experiencing FoodMASTER's scientific inquiry labs.

Introduction

Welcome to the FoodMASTER Intermediate program! The curriculum contained in this packet was developed by FoodMASTER with funding from the National Institutes of Health: Science Education Partnership Award to present intermediate grade students with ten basic topics in foods. Each topic area includes hands-on and computer based lessons to take your students on an exciting and innovative exploration of food, mathematics and science. These engaging lessons will have your students developing skills and thinking about learning in a new fashion that is fun and exciting for everyone involved. For each lesson in this manual you will find a summary of the unit, objectives, national mathematics and science content standards addressed, a list of materials needed, detailed instructions for completing the activity, teacher tips and answer keys.

The student workbook pages are designed to be kid friendly and easy for both teachers and students to follow. Each "Scientific Inquiry" activity can be adapted to fit a variety of classroom structures. Teachers are encouraged to read through the labs ahead of time and decide on the best format (teacher-directed, small groups, or individual) for completing each lab with their students. Chosen method of implementation may vary depending on the amount of time, equipment and supplies, and number of classroom adult supervisors available; as well as safety consideration and learner needs. Computer-aided learning materials are as simple as popping a CD into the computer

and letting your students start clicking away. The hands-on and computer-aided lessons may be combined to create a multimedia curriculum or may stand alone. Teachers may choose to follow a hands-on, computer based or combined format.

Each of the ten FoodMASTER Intermediate student chapters includes a brief introduction, one to three hands-on lessons, one to three computer-aided lessons and proficiency questions. Hands-on and computer-aided lessons begin with reading activities, which introduce students to new vocabulary words and engage students in the unit topic. After reading a brief passage out loud as a class or silently, students will complete fun “Doodle Bugs,” which promote reading comprehension. Students participating in hands-on lessons will develop science and mathematics inquiry and problem solving skills using real food to complete “Scientific Inquiry” labs. Some lessons may include a “While You Wait” food activity that engages students in active learning, while food is baking or cooking. A flexible and creative classroom atmosphere will enhance the hands-on curriculum. Students participating in computer-aided lessons will be engaged in mathematics and science learning as they play virtual food games, complete virtual activities or observe computer generated animations. The computer aided format allows students to explore food without any mess. “Try this At Home” activities or recipes are found at the end of each hands-on and virtual lesson. Please send these pages home with students to reinforce classroom learning and to encourage parents and students to learn nutrition facts together. Computer-aided lessons’ “Try this At Home” pages will need to be printed from the FoodMASTER Intermediate CD.

What it takes to be a FoodMASTER

Are you enthusiastic enough to be a FoodMASTER? The hands-on FoodMASTER activities in this booklet do take the commitment of a special teacher who is willing to take the extra time to bring food and supplies into the classroom. It also requires that teachers manage their classrooms in a more open fashion that they may not be comfortable with initially. However, if you desire to see mathematics and science come to life for your students, you will find this method very enjoyable, rewarding and satisfying. Teachers desiring food based activities with less mess and time commitment may choose the computer aided format or combined format. Either way, you will be filled with satisfaction when you see students applying real-life mathematics and science in the classroom and as you hear students share their stories of food lab cooking at home. Previous work with the FoodMASTER method, in an intermediate grade class, indicated that 85% of the students repeated one or more of the activities at home.

We hope that you will find the materials packet easy to use and that it provides you with the information you need to convey food, mathematics and science concepts and knowledge to students in your class with ease and simple preparation. However, if you are interested in becoming more knowledgeable about each of the topics in FoodMASTER Intermediate, check out www.foodmaster.org for more information.

Food Safety Note

It is very important for you to follow and model good food safety behaviors! Your students will learn proper food safety practices in chapter two of the curriculum. You will need to continue to reinforce good sanitation and safe food handling practices throughout the curriculum. Please, be sure to remind students to never eat foods until they are instructed and be sure students have washed their hands before preparing or eating foods. Never, serve raw or undercooked meats or eggs, unpasteurized milk, spoiled foods or expired foods. For Scientific Inquiry activities involving eggs try buying eggs pasteurized in their shells.

Keep your classroom safe by thoroughly washing all kitchen utensils, supplies, equipment, counters, desktops and sinks. You should also maintain a Material Safety Data Sheet (MSDS) for all chemicals and cleaning supplies used or stored in the classroom. Cleaning supplies and sharp objects, such as pairing knives and can openers, should be safely stored away for teacher use only. Keep dry food items safely stored in tight containers and perishable items stored in a refrigerator or for short periods of time in a cooler with ice.

Finally, be aware of any food allergies or intolerances. Students with food allergies could have mild to severe reactions if they taste, touch or in some cases even smell their food allergen. Modify activities, when needed, to prevent allergic reactions and consider providing an appropriate alternate snack for students with food allergies or intolerances.

Academic Content Standards References:

National Research Council (NRC). (1996). *National science education standards*. Washington, DC: National Academy Press.

National Council of Teachers of Mathematics (NCTM). (2000). *Principles and standards for school mathematics*. Reston, VA: Author.

Equipment and Supply List

Listed below is a complete list of equipment, supplies and nonperishable foods you will need to complete all the FoodMASTER Intermediate activities. Needs are based on classrooms with 24 students and assumes four students per group. You may need to adjust for more or less students.

Equipment and Supply Purchasing

Equipment and supplies may be purchased well in advance to eliminate multiple trips to the store. Before shopping for new equipment and supplies, check your classroom stock and school supply room. In the lists below, **bold** items are equipment and supplies that are considered “out of the ordinary” for a classroom setting and teachers will need to obtain these items. For budgeting purposes, if you purchase all of the **bold** items at reasonable prices, it would cost you approximately \$500.00; however most items can be reused year after year.

Tips for obtaining equipment, supplies and food

- Try applying for small grants
- Ask for donations from your local retailers
- Shop around for sale items
- Check out garage sales or thrift stores for items in good shape (Be sure to thoroughly scrub and sanitize these items before use.)
- Watch for surplus items from school systems
- Include basic items on your classroom supply list
- Ask parents for donations
- Share equipment with family and consumer science classrooms
- Ask administration for support

When purchasing items, it is important to balance price verse quality. It is not necessary to purchase “top of the line” equipment and supplies, but it is important to make sure that the equipment quality is good enough to hold up from year to year to meet your activity needs. We will make some recommendations about items below to help guide your choices and make your purchasing process a little easier.

Equipment

Toaster oven or oven (double rack)

1 double burner hot plate

1-2 hand mixers

1 UV light (with Glo-germ gel)

With good planning, the activities can usually be managed with two low quality single rack toaster ovens. However, having a good toaster oven will make the activities even more enjoyable. We recommend one double rack toaster oven. Some teachers even put a larger oven on their classroom “wish list”. Other teachers use larger ovens already available in their schools. We recommend a medium quality double burner hot plate. Less expensive basic small hand mixers are usually the easiest for students to handle. Most likely, you will have to purchase a UV light and Glo-Germ™ gel on-line so plan ahead. Use search terms like Glo-Germ™ gel and UV light to shop for the best price.

Another option for the UV light and Glo-Germ™ gel is to contact your local USDA Extension Agent and ask if they have the equipment. Your agent may allow you to borrow the equipment or may even come to your classroom to help deliver the food safety lesson. In addition, teachers with limited access to refrigerator space may add a small refrigerator to their “wish list.”

Cookware

- 1 large pot (stock pot)**
- 2 medium-large pots with lids**
- 2 frying pans**
- 6 cookie sheets (toaster oven size)**

Ideally, clear pots with lids will be purchased. However, clear pots are often expensive and difficult to find. Purchasing a cooking set is the most cost effective option and will get you all of the pots and pans you need. Look for a set that includes at least a large stock pot with lid, 2 sauce pans with lids and 2 frying pans. We recommend purchasing a stainless steel set that has clear lids, so your students will be able to look inside the pots. (You will need a stainless steel stock pot to make cheese.) Your toaster oven will come with at least one cookie sheet. If you have difficulty finding additional cookie sheets to fit your toaster oven, try letting students put their items on disposable foil sheets. You can cut, bend or fold the sheets to fit the size of your oven. Alternatively, students can place items on foil and then transfer items to the one cookie sheet as it becomes available.

Bowls

- 7 small mixing bowls**
- 6 medium bowls**
- 2 large mixing bowls**

Any type/quality of mixing bowl will do, but plastic is probably safer and the most cost effective.

Kitchen Measuring Equipment

- 7 sets of dry measuring cups**
- 6 sets of measuring spoons**
- 6 liquid measuring cups**
- 2 small glass liquid measuring cups (with ounce increments marked)**
- 6 food scales**
- 1 clock or 2 timers
- 6 bimetallic stemmed thermometers**

We recommend plastic measuring sets for safety and cost efficiency. For the purposes of these activities, it is not necessary to have six high quality scales. We suggest purchasing one digital scale and five smaller inexpensive kitchen scales.

Equipment and Supply List (continued)

Utensils

- 1-2 spatulas**
- 6 stirring spoons**
- 2 slotted spoons**
- 1 pair of tongs**
- 1 ice cream scoop**
- 1 can opener**
- 1 egg separator**
- 1 paring knife**
- 1 fork**
- 12 small spoons (or 24 spoons)**
- 7 table knives (or 24 knives)**
- 24 forks optional**
- 1 apple slicer/corer (optional)**

Any type/quality of utensils will do. Look for blunt table knives that are not sharp at all and spoons that will be easy for kids' hands to handle. You may consider purchasing a set of 24 forks, spoons and knives. In the long run, this will cut down on costs and storage space needs associated with disposable items. However, using disposable forks, spoons and knives will decrease cleanup time. Remember, you must keep the paring knife and can opener safely stored for adult use only.

Other

- 3 plates**
- 6 pitchers to hold water**
- 6 plastic trays (cafeteria style)
- 1 cutting board**
- 1-2 wire cooling racks or foil sheets**
- 1 strainer or colander**
- 12 glass jars with lids (1/2 pint size or larger)**
- 2 dishcloths**
- 2 dishtowels**
- 1 set of oven mitts**
- 2 pot holders**
- 1 bottle Glo Germ™ gel (see note under Equipment)**
- 1 deck of cards (representing 2-3 ounces of meat)
- 1-2, 18-gallon storage containers with tight lids (to store food and supplies)**
- 1 large cooler to transport food safely (optional)**

Any quality of equipment here will do as well. If desired, 6 mixing bowls can be used in place of the 6 pitchers; however, you will still need one pitcher. Jars with lids can be difficult to find if it is not canning season, so plan ahead. Egg separators can sometime be hard to find as well. If you will be purchasing perishable food items and traveling a distance to school, you may consider purchasing a cooler to keep foods safe. A cooler filled with ice can also keep foods safe in the classroom.

Classroom Supplies

24 hand lenses
6-24 measuring tapes (or string & rulers)
6-12 rulers
24 pencils
6 packages of colored pencils
1 permanent marker
6 yellow markers
6 red markers
6 green markers (optional)
1-2 rolls of masking tape
6 eye droppers (optional)

Hopefully, as a teacher, you will have many of these supplies already on hand. Try finding hand lenses at discount stores, teacher catalogues or on-line to get a good price.

Disposable Items

18 gallon-size re-sealable zipper storage bags
1 roll of foil
2 rolls of paper towels
72 napkins
42 small foam cups (or 24 heat stable non-disposable cups)
48 cups (8-ounce)
170 small cups (Dixie cup style)
80 disposable spoons (or 24 non-disposable spoons)
48 disposable forks (or 24 non-disposable forks)
350 disposable plates (or 24 non-disposable plates plus 10 paper plates)
1 half-pint milk carton (emptied and washed out)
1 bar of soap
1 bottle kitchen sanitizer
1 cheese cloth (optional)

Disposable supplies will need to be replaced year after year. Purchase these items in bulk at a discount retailer or try asking parents to donate some of these items to the classroom.

Food Purchasing

When purchasing food items, shop ahead for sales, clip coupons or try discount food stores for better prices. To keep food purchasing as simple as possible, we recommend that you purchase all of your nonperishable food items before beginning FoodMASTER. Keep these items stored in tight containers in a cool dry storage area. To minimize the possibility of contamination, do not let students obtain their ingredients directly from the storage supplies. We suggest that you or another adult obtain all the ingredients needed for each lesson and set them out in bowls. Students may then gather supplies and measure from these bowls. We also recommend replacing nonperishable items on a regular basis. Be sure to check expiration dates and label items as to purchase dates. For budgeting purposes, if you were to purchase all the nonperishable food items at reasonable prices, it would cost you approximately \$100.00. Budget another \$100.00 for the perishable food items, which will need to be purchased before selected labs.

Equipment and Supply List (continued)

Nonperishable Food Supplies

Baking Products

- 1 pound sugar
- 3 pounds brown sugar
- 2 pounds flour
- 1 small container unsweetened cocoa powder
- 4 packages semisweet chocolate chips
- 18 packets of active dry yeast

Spices/Flavoring

- 1 ounce imitation or regular vanilla extract
- 1 container baking powder
- 1 container baking soda
- 1 container salt
- 1-2-ounce container dry mustard
- 2-ounce container paprika
- 2-ounce container ground pepper
- 1.75-ounce container oregano
- 1.5-ounce container cream of tartar
- Optional: basil, garlic, parsley and onion flakes

Canned Goods

- 15-ounce can of pineapples (un-drained)
- 16-ounce can of diced new potatoes
- 16-ounce can of carrots
- 16-ounce can of corn
- 16-ounce can of green beans
- 26-ounce jar of pasta sauce
- 48-ounce can of tomato juice
- 2 salmon pouches (6-7-ounces each)

Condiments

- 1 small bottle of ketchup (optional)
- 1 bottle of mustard (optional)
- 1 bottle light mayonnaise (optional)
- 16-ounce jar chunky salsa
- 16-ounce bottle of ranch salad dressing
- 16-ounce bottle of light ranch salad dressing
- 16-ounce bottle of fat-free ranch salad dressing

Other

- 24 prunes
- 1 small bottle lemon juice
- 32-ounce bottle of vinegar
- 1 bottle cooking spray
- 1 small bottle canola cooking oil (24 ounces)

Cereals and Snacks

- 5 cups quick oats
- Box Wheat Chex® (or generic)
- Box Cheerios® (or generic)
- Box Frosted Shredded Wheat® (or generic)
- Box Frosted Flakes® (or generic)
- Box Froot Loops® (or generic)
- 50 whole grain crackers
- 48 crackers
- 2, 12-ounce bags mini pretzels (24 ounces)

Pastas and Grains

- 1 package instant whole grain brown rice (not boil in a bag or a rice mix)
- 16-ounce box regular pasta
- 16-ounce box whole wheat pasta (rotelle, farfalle or spaghetti)

Chapter by Chapter Equipment and Supply List

Equipment and Food Supplies are separated by chapters for easy in food purchasing and lesson preparation. Perishable food items are **bold** and will need to be purchased just prior to doing the "Scientific Inquiry" lab. Needs are based on classrooms with 24 students and assumes four students per group. You may need to adjust for more or less students. It is recommended that you read each chapter before purchasing items on this list because you may want to make recommended substitutions or adjust for your individual classroom needs.

Chapter 1: Measurement

3 cups butter (6 sticks)

6 eggs

6 cups packed brown sugar

7 1/2 cups flour

6 cups chocolate chips (3 packages)

4 1/2 cups oats

1 1/2 teaspoons vanilla extract

2 tablespoons baking powder

1 tablespoon baking soda

1 tablespoon salt

Water

Toaster oven or oven

6 cookie sheets (toaster oven size)

7 sets dry measuring cups

6 sets measuring spoons

6 liquid measuring cups

1 spatula

6 stirring spoons

12 small spoons (not disposable)

7 table knives

7 small or medium bowls

6 medium bowls (or large bowls)

6 pitchers (or 1 pitcher and 6 medium bowls to hold water)

6 food scales

6 plastic trays (cafeteria style)

1-2 wire cooling racks or foil sheets

18 gallon-size re-sealable zipper storage bags

1 set of oven mitts

6 eye droppers (optional)

Chapter 2: Food Safety

18 packets of active dry yeast

1 1/2 cups cold water

6 ice cubes (optional)

1 1/2 cups lukewarm water

1 1/2 cups boiling water

Sink

1 double burner hot plate

1 small pot

6 liquid measuring cups

6 bimetallic stemmed thermometers

6 pieces of paper and pencils

6 pencils

1 permanent marker

6 yellow markers

6 red markers

6 green markers (optional)

18 small foam cups

6 paper towels

1 bottle Glo Germ™ gel

1 UV light

Soap

Chapter by Chapter Equipment and Supply List (continued)

Chapter 3: Vegetables

1 head of broccoli
6 celery stalks
6 lettuce leaves
1 head of red cabbage
6 green peppers
6 potatoes
1 raw carrot
1 white onion
 16-ounce can of diced new potatoes
 16-ounce can of carrots
 16-ounce can of corn
 16-ounce can of green beans
 6 cups tomato juice
 3 tablespoons of vinegar
 3 tablespoons of baking soda
 1 teaspoon pepper
 1 teaspoon oregano
 Optional: basil, garlic, parsley, onion
 flakes, red pepper, brown sugar
 8 cups of water
 Double burner hot plate
 1 large pot (stock pot)
 2 medium pots
 1 liquid measuring cup
 1 set of measuring spoons
 1 large stirring spoon
 2 slotted spoons
 1 paring knife
 3 plates (strong)
 1 can opener
 1-6 food scales
 6-24 hand lenses
 6-24 measuring tapes (or string & ruler)
 24 spoons
 24 cups or bowls (foam/heat stable)

Chapter 4: Fruits

7 apples
8 slices of cantaloupe
8 clementines
6 peaches
6 strawberries
7 bananas
1 1/4 cups red seedless grapes
4 plums (cut into 24 plum pieces)
 24 prunes
 15-ounce can of pineapples (un-drained)
 1 tablespoon sugar
 1 tablespoon lemon juice
 1/4 teaspoon cream of tartar
 1/4 teaspoon water
 1 set measuring cups
 6 sets measuring spoons
 1 large bowl
 1 stirring spoon
 6 small plates
 24 real plates or 72 paper plates
 6 table knives
 24 real spoons or 30 disposable spoons
 24 small bowls or small cups
 1 paring knife
 1 cutting board
 24 hand lenses
 6 plastic trays (cafeteria style)
 6 packages of colored pencils
 Apple slicer/corer (optional)
 1 clock or timer
 1 can opener
 Masking tape
 Paper towels
 3 signs: "Prunes," "Dried Plums," and
 "Not Sure."
 24 napkins

Chapter 5: Milk and Cheese

1/2 gallon whole milk
1 1/2 gallons 2% milk
1/2 gallon skim milk
1/2 gallon soy milk
24 slices regular American cheese
24 slices low-fat American cheese
 1 teaspoon salt
 1/2 cup vinegar
 48 crackers
 1 double burner hot plate (or single burner)
 1 stock pot (not aluminum)
 1 set measuring cups
 1 set measuring spoons
 1 medium bowl
 1 table knife
 1 large spoon
 1 bimetallic stemmed thermometer
 1 clear glass or jar
 4 trays (cafeteria style) or trash cans
 1 strainer
 1 cheese cloth (optional)
 48 small plates or napkins
 96 small cups (Dixie cup style)
 4 "type of milk" signs ("Whole," "2%," "Skim,"
 "Soy")
 12-24 food labels for each milk
 12-24 food labels for each cheese

Chapter 6: Meat, Poultry and Fish

1 pound 70% lean ground beef
1 pound 90% lean ground beef
1 package regular hotdogs
1 package turkey hotdogs
8-ounce package light cream cheese
1 1/2 cups finely chopped vegetables
(celery, zucchini, cucumbers or carrots)
12 buns (optional)
2 salmon pouches (6-7-ounces each)
16-ounce jar chunky salsa
50 whole grain crackers
1 bottle ketchup (optional)
1 bottle mustard (optional)
Water
1 double burner hot plate
2 frying pans
2 large pots
1 set of measuring cups
2 small liquid measuring cups
1 mixing bowl
1-2 spatulas
Tongs
1 stirring spoon
1 fork (real)
1-2 table knives
1 thermometer
1 food scale
53 paper plates (or 24 real plates and
4 paper plates)
Cost for each package of hotdogs
12-24 food labels for each kind of hotdog

Chapter 7: Eggs

12 raw pasteurized shell eggs
7 hard boiled eggs
2/3 cup sugar
1/3 cup semisweet chocolate chips
1 bottle cooking spray
1/2 teaspoon vanilla extract
1 tablespoon unsweetened cocoa powder
1/8 teaspoon cream of tartar
Toaster oven or oven
1-2 hand mixers
1-2 toaster oven cookie sheets
1-2 liquid measuring cups
19 plates or bowls
2 mixing bowls (medium)
1 small bowl
1 table knife
1 spatula
1 egg separator
6 food scales
6-12 rulers
6-12 tape measures (or five-inch strings
and rulers)
12-24 hand lenses
Oven mitts
2 pot holders
6 packages colored pencils
24 napkins
Paper towels

Chapter 8: Fats

1 bunch of celery
1 package of carrots
1 head of broccoli
1/2 gallon regular ice cream*
1/2 gallon reduced-fat ice cream*
1/2 gallon fat-free ice cream*
16-ounce bottle of ranch salad dressing
16-ounce bottle of light ranch salad dressing
16-ounce bottle of fat-free ranch salad
dressing
3 cups vinegar
3 cups cooking oil (canola oil)
12 teaspoons dry mustard
12 teaspoons paprika
6 liquid measuring cups
6 sets measuring spoons
24 plates
1 ice cream scoop
12 glass jars with lids (1/2 pint size or
larger)
1 roll masking tape
1 permanent marker
6 packages colored pencils
72 small cups
24 spoons
12-24 food labels for each ice cream
12-24 food labels for each salad dressings
*Purchase the same flavor and brand of ice
cream if possible

Chapter by Chapter Equipment and Supply List (continued)

Chapter 9: Grains

Box Wheat Chex® brand name or generic)
Box Cheerios® (or generic)
Box Frosted Shredded Wheat® (or generic)
Box Frosted Flakes® (or generic)
Box Froot Loops® (or generic)
1 package instant whole grain brown rice (not boil in a bag or a rice mix)
16-ounce box regular pasta (or generic)
16-ounce box whole wheat pasta (rotelle, farfalle or spaghetti)
26-ounce jar pasta sauce
Salt
Water
Double burner hot plate
2 large pots
1 medium pot with a lid
1 liquid measuring cup
1 set measuring spoons
1 set dry measuring cups
1 serving spoon
2 stirring spoons
1 plastic bowl
1 colander or strainer
1 pair of tongs
1 food scale
2 timers or 1 clock
2 hot pad holders
6 packages colored pencils
24 real plates (or 72 disposable plates)
24 real forks (or 48 disposable forks)
Food labels for regular pasta & whole wheat pasta

Chapter 10: Meal Management

24 slices 100% whole wheat bread
24 slices of turkey lunchmeat (1-ounce slices)
24 slices cheddar cheese (3/4-ounce square slices)
5 pounds of baby carrots (12 cups)
1 head of lettuce (optional)
2, 12-ounce bags mini pretzels (24 ounces)
1 bottle light mayonnaise (optional)
1 bottle mustard (optional)
1 1/2 gallons of water
1 set measuring cups
1 set measuring spoons
1 liquid measuring cup
1 table knife
1 half-pint milk carton (emptied and washed out)
1 deck of cards
1 tennis ball
1 kitchen scale
24 pencils
24, 8-ounce cups
25 plates (1 should be paper)