

Dear Parents,

This year our class is going on a journey to discover the health benefits and eating pleasure of fresh foods. Our activities will center around a FREE online game you can access at www.foodbackwards.com. The educational value of the game will be reinforced with classroom lesson activities and fun pages in *Kid Scoop News*.

I encourage you to have your child play the Planet DOOF game at home or at a local library or computer center. Just to foodbackwards.com/planet-doof or just click “play now!” on our home page. Planet DOOF does require that you download the Unity Web Player which is the world’s most common game engine and designed to make it easy for just about anyone to play.

The Planet DOOF team collaborated with kids across California (Fresno, Merced, Planada, Riverside, Castro Valley and Berkeley) to develop content for the game including artwork, dialogue and voice recordings. We have tested the game with hundreds of kids and have found a way to make nutrition education interactive, fun and memorable.

Planet DOOF presents kids with a choice of ingredients for their sandwich, some are healthy and others are not. As they make these choices they learn about how the foods are grown, created and sourced and are rewarded according the how healthy their sandwich is and how good they are at the games required to gather ingredients.

I encourage you to play the game with your children and continue the conversation about fresh, healthy food at home.

For more educational resources visit: <http://www.foodbackwards.com/planet-doof>

Sincerely,

Planet DOOF Team

Planet Doof – Tomato Lesson Plan

Objectives

Students will:

- Understand tomato is a healthy food choice
- Build content vocabulary
- Know key indicators for tomato readiness and harvesting
- Understand cause and effect
- Identify items needed to grow healthy tomatoes in a garden
- Connect five senses to food
- Practice friendly letter writing skills

Ready!

Prepare your students for the tomato game and lesson by watching this video from the Planet DOOF

Channel: http://www.foodbackwards.com/channel-doof/?tubeprss_page=2

ASK: *Who has grown a vegetable or fruit from a seed or seedling? What kind of plant did you grow?*

Chart responses. *What did you do to keep your plant healthy? How did you know when the fruit or vegetables were ready to be picked?*

SAY: *Today we are going to visit a tomato garden with our alien friends, Zorp and Carl, who have no idea where tomatoes come from, how they're grown or how to tell when tomatoes are ready to be picked. You'll be their expert guide and teach them important facts about tomatoes so they can make the tastiest and healthiest sandwich to take back to their spaceship.*

Set!

DO: Copy this chart of vocabulary words from the game.

SAY: *Zorp and Carl need to understand these words, but the meanings are all mixed up! Today you will work with a partner to match the words with the right definition. Review with group.*

<i>Word</i>	<i>Mixed Up Meaning</i>
vine	words with double meanings
explode	bitter tasting
ripe	a piece of ground for growing fruits and vegetables
sour	a plant that grows grapes
pun	hands that are closed
garden	ready to eat
fists	burst open

Go!

SAY: Today you are going to meet a couple of extraterrestrials named Zorp and Carl. You will meet them in the Planet DOOF video game at <http://www.foodbackwards.com>. Once there, look for the answer to this question (**WRITE on board**) How can you tell when a tomato is ripe and ready to be picked? (A: When it's red, it's "red-y!")

Guide your students through the process of loading the Planet DOOF game onto your classroom computer(s):

(MIKE - I need to review these steps with you)

Allow time for students to play the Planet DOOF game. Follow up with one or more of the activities in the Beyond section of this lesson.

Beyond

1. **WRITE** "Cause" phrases on the board in a "T-Chart." **ASK** students to help you complete the "Effect" side. (Answers are shown.)

Cause	Effect
Because Zorp and Carl were hungry,	they looked in the refrigerator for food.
If you squeeze the tomatoes too hard,	they will squoosh!
Because Zorp and Carl waited until the tomatoes were red before picking,	they had ripe tomatoes for their sandwich!

2. **Garden Checklist.** Check "Yes" or "No" to identify what is needed for healthy tomatoes.

Checklist	Yes	No
Seeds or seedlings for planting		
Salt		
Water		
Bugs		
Sunshine		
Weeds		
Picking when red		

3. **It Makes Sense!** Guide students to complete the chart to see how their five senses know when tomatoes are ripe.

Sense	Tomato Readiness Indicator
Sight	<i>red and full</i>
Smell	<i>"summery" fruity smell</i>
Touch	<i>firm and not "squooshy"</i>
Taste	<i>Sweet and juicy; not "mealy"</i>
Hearing	<i>snap when you pick off the vine</i>

4. **WRITE ON!** *Imagine you are Zorp writing a postcard home to mom telling her about your adventure on Earth. What would you tell her about your day in the garden and your new friend?*

Planet Doof – Avocado Lesson Plan

Objectives

Students will:

- Understand avocado is a healthy food choice
- Build content vocabulary
- Learn facts about avocados
- Differentiate between fact and opinion
- Practice rhyming skills
- Draw an alien pet that looks like an avocado

Ready!

ASK: Avocados are a unique and tasty food. What do you already know about “avocados?” (Chart responses) What would you like to learn? (Chart responses)

SAY: Today we are going to visit an avocado grove with Zorp. A grove is a special kind of orchard or place where farmers plant a lot of the same kind of fruit to harvest.

Set!

DO: Write the following vocabulary words from the game.

SAY: Let’s review some of the words you will see before you play the game and discover how many definitions you already know. Review with group.

Word	Definition
grove	an orchard
pits	seeds inside fruit
avocado	a pear-shaped fruit with tough skin and smooth edible flesh
warmth	moderate heat
catch	Grab something that has been dropped

Go!

SAY: As you learn about avocados at <http://www.foodbackwards.com>, try to remember three or more facts about them. (A: Avocados are a fruit, grow in a grove, grow on trees, are green, have a large pit, etc.)

Beyond

1. **Rhyme Time** – In teams of two, how many words can you think of that rhyme with words from the game?

Vocabulary	Rhyming Words
grove	
seed	
pit	
fall	
need	
catch	
grow	

2. **Fact or Opinion?** A fact is a statement that can be proven true or false. An opinion is a feeling that cannot be proven. Using information from the Avocado Lesson, decide if the following are fact or opinion.

Statement	Fact	Opinion
a. An avocado is a fruit.		
b. The best fruit is an avocado.		
c. With warmth from the sun, avocados will ripen.		
d. Pits grow inside fruit.		
e. Avocados are the only fruit you should buy.		
f. Avocados grow on trees.		
g. Avocados are best in guacamole.		

3. **Art Works!** Zorp thinks an avocado looks like his pet Zoo-ba. What do you think Zoo-ba might look like? Use crayons, construction paper or paint to create your version of Zorp's alien pet.

Planet Doof – Lettuce Lesson Plan

Objectives

Students will:

- Understand lettuce is a healthy food choice
- Build content vocabulary
- Learn facts about lettuce and gardening
- Identify problem and solution
- Use context clues to identify nouns and verbs

Ready!

ASK: *What kinds of vegetables do you use to make a salad? (Brainstorm)*

SAY: *Zorp needs to learn more about lettuce, and why it's a healthy food choice with "nutritional value" – meaning it's full of vitamins and minerals that help your body grow. Let's join our friends in the garden today, and learn more about leafy lettuce.*

Set!

DO: Write the following vocabulary words from the game.

SAY: *I will read the word first while you listen. Then you read the word with me. Finally, you will read the word by yourself. Then we can chart what the words mean.*

Word	Meaning
lettuce	a leafy vegetable
snail	a soft bodied animal with a shell (mollusk)
weeds	an unwanted plant
sprouts	young plants
watering can	a can with a spout used to water plants
pick	a sharp tool

Go!

SAY: *As you learn about lettuce at <http://www.foodbackwards.com>, look for at least two problems that might keep lettuce from growing. (e.g., rabbits eating sprouts, snails invading, lack of water, weeds, etc.)*

DISCUSS.

Beyond

4. **Problem Solve** – In teams of two, how would you solve these garden problems?

Problem	Solution
a. Rabbits are eating the sprouts.	
b. Plants are dry and drooping.	
c. Weeds are using up the water.	
d. Snails are invading.	
e. The watering can has a hole in the bottom	
f. Lettuce ready for picking!	

5. **Fill in the Blanks** – Use nouns and verbs from the word bank to fill in the blanks.

Nouns	Verbs
garden	eat
lettuce	water
snails	dig
egg shells	pull
weeds	harvest
sprouts	scatter

- A. To grow lettuce in your _____ (noun), you first have to _____ (verb) a hole in the ground for seeds.
- B. If you _____ (verb) the seeds every day, they will soon grow into tiny green _____ (noun).
- C. Water will also make pesky _____ (noun) grow, and you will have to _____ (verb) them out so they don't use the water meant for the lettuce.
- D. You might get invaded by _____ (noun) who want to _____ (verb) the tasty buds.
- E. To protect the lettuce from slugs or snails, _____ (verb) _____ (noun) around the garden.
- F. When the _____ (noun) is green with wavy leaves, it's time to _____ (verb) and enjoy!

Planet Doof – Bread Lesson Plan

Objectives

Students will:

- Understand unprocessed bread is a healthy food choice
- Build content vocabulary
- Learn facts about wheat
- Complete “if....then...” statements
- Divide words into syllables
- Sequence steps from wheat to bread

Ready!

SAY: Today you’re going to help Carl and Zorp learn how to turn wheat into bread! Although bread comes in all shapes and sizes, it’s all made from grains. Most bread is made from a special kind of grain called “wheat”.

ASK: How many different kinds of wheat products can you name? (Chart responses. Examples: hot dog buns, hamburger rolls, sandwich bread, French bread, bagels, English muffins, etc.)

Set!

DO: Write the following vocabulary words from the game.

SAY: Let’s review some of the words you will see before you play the game and sort these words into nouns and verbs. Remember, a noun is the name of a person, place or thing, while a verb shows action. Some words can be both nouns and verbs, depending on how they are used in the sentence. Review with group.

Word	Noun	Verb	Word	Noun	Verb
wheat	x		flour	x	
mill	x		gluten	x	
grind		x	bread	x	
creature	x		sandwich	x	
loaves	x		stalks	x	
scythe	x		blade	x	
ingredient	x		windmill	x	
collect		x	swipe		x

Go!

SAY: As you learn about making bread by playing the game at <http://www.foodbackwards.com>, look and listen for three key ingredients Carl must add to the wheat flour to make bread.

ASK: What three ingredients did Carl add to the wheat flour? (A: salt, yeast and water)

Beyond

6. **If...then** Use what you learned in the game to complete the following “if...then” statements.

If....	...then
h. If you want to make bread,	...then you will need to _____.
i. If you have to cut the wheat stalks,	...then you will need to _____.
j. If you need to grind the wheat,	...then you will need to _____.
k. If you want to make dough,	...then you will need to _____.
l. If you want the dough to rise,	...then you will need to _____.
m. If you want the dough to cook,	...then you will need to _____.
n. If you want to have a healthy sandwich,	...then you will need to _____.

7. **Syllable Scythe** – You used the scythe to cut the wheat to grind into flour. A scythe is a cutting tool. Let’s use the scythe again! Draw a line where the scythe would cut these game words into syllables. Remember, every syllable must have one vowel sound.

Word	Syllables
creature	crea/ture
ingredient	in/gre/di/ent
collect	col/lect
gluten	glu/ten
sandwich	sand/wich
windmill	wind/mill
water	wa/ter

8. **Sequencing** Carl tried to remember the steps for making bread, but he got them mixed up. Can you help him by numbering the steps in the right order from 1 to 6?

- A. Put the dough in the oven.

- B. Plant the wheat.

- C. Add water, salt and yeast.

- D. Cut the stalks.

-

- E. Grind the wheat.
-
- F. Bring the cut wheat to the mill.
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- Answer: B, D, F, E, C, A

Planet Doof – Turkey Lesson Plan

Objectives

Students will:

- Understand fresh sliced is a healthy food choice
- Build content vocabulary
- Learn facts about turkeys and how they are raised
- Design a safe and healthy turkey farm
- Practice syllabication

Ready!

ASK: How many different kinds of birds can you name? (Chart responses)

SAY: Carl and Zorp need to select some fresh meat for their sandwich. They have a choice between bologna and sliced turkey. Which should they choose and why?

Set!

DO: Write the following vocabulary words from the game.

SAY: Let's review some of the words you will see before you play the game and draw a quick sketch of what the word means. Write the words on the board; have students copy and illustrate the meaning. Write the word under their illustrations.

Word	Sketch
feathers	
scarecrows	
water balloons	
squirt guns	
coyotes	
turkey	
fuzzy	

Go!

SAY: As you learn about turkeys at <http://www.foodbackwards.com>, try to remember four or more facts about them. (A: they are birds, have feathers, raised on farms, good in sandwiches, good in salad, coyotes like to eat them, etc.)

Beyond

9. **Syllable Sorter – SAY:** *In teams of two, sort the following words from the story into groups of words with one syllable (like “farm”), two syllables (like “turkey”) or three syllables (like “coyote”). Give yourself five points for every correct answer. Can you score 60 points?*

Word Bank		
salads	possible	roast
balloons	scarecrows	defenses
roam	birds	feathers
squirt	sandwiches	fuzzy

1 Syllable	2 Syllables	3 Syllables
farm	turkey	coyote

Possible Score: 60 Our Score: _____

10. **True or False? SAY:** *Which of the following statements from the game are **TRUE**?*

Statement	TRUE	FALSE
o. Turkeys are mammals.		x
p. Some farms raise turkeys.	x	
q. Turkey predators include other turkeys.		x
r. Sliced turkey meat is good in salads or sandwiches.	x	
s. Bologna is raised on a farm.		x
t. Turkeys are a kind of bird.	x	
u. Coyotes can be a danger to turkeys.	x	

11. **Design It!** *Zorp and Carl want to create a turkey farm that has better protection from the coyotes. Work with a partner or team to think of all the unique features a turkey farm might have to keep the birds safe and healthy. Include plenty of space for turkeys to roam, but be sure to protect them from harm!*

Welcome to Planet DOOF!

Kid Scoop News is pleased to partner with Planet DOOF to promote healthy eating. If you discovered Planet DOOF from reading the special Planet DOOF page in *Kid Scoop News*, welcome! If you haven't seen the *Kid Scoop News* Planet DOOF activity page, it is included at the end of this lesson plan.

Planet DOOF is a computer game that teaches kids 8-12 where healthy foods come from. By playing this game kids draw a deeper connection to and greater enjoyment from the fresh foods we want them to eat. Kids learn how to grow and harvest foods such as avocados, tomatoes, lettuce, whole wheat bread and turkey.

Planet DOOF is designed to enhance the experiences of kids with access to real gardens and offer inspiration to those who don't. Kids play Planet DOOF by teaching extraterrestrial characters (ET's) about the cool food here on Earth. On Planet DOOF, kids explore the magic of food as they prepare a healthy snack for their ET friends. Planet DOOF is designed to be as simple and accessible for your students to play, **just download the Unity Game Engine from the Planet DOOF page and you're good to go!**

The Story of Planet DOOF

Extraterrestrials, Zorp and Carl, are from a planet where there's no such thing as "food." On their journey they encounter a refrigerator and a curious boy who offers to help them build a sandwich from the best and healthiest ingredients they can find.

Planet DOOF is FREE!

If you work at a school, you and your students can have access to the world of Planet DOOF free of charge! We don't think food education should cost a penny, so we have worked hard to make sure you can play Planet DOOF at no cost.

Start With the Basics

Like all academic concepts, nutrition education works by building upon previously learned topics. Planet DOOF makes learning food education concepts easy and super fun! By having the player control their food choices by interacting with the sourcing of different foods, learning what is healthy versus what is unhealthy becomes much clearer.

Involve Families

With this lesson plan there is a letter to parents, which you can print and copy for your students. It informs families about your nutrition education activities and explains how they can reinforce learning by playing Planet DOOF at home.

Compliment Your Lesson Plan

Already teaching your students food education concepts? Planet DOOF can be a great addition to your lesson plan. As you know, not all students learn in the same way, and different methods of teaching can help you and your students achieve the results you want. Through interactive game play Planet DOOF works with your lesson plan to show students, through their own actions, why choosing healthy food is better.

See more at: <http://www.foodbackwards.com>

