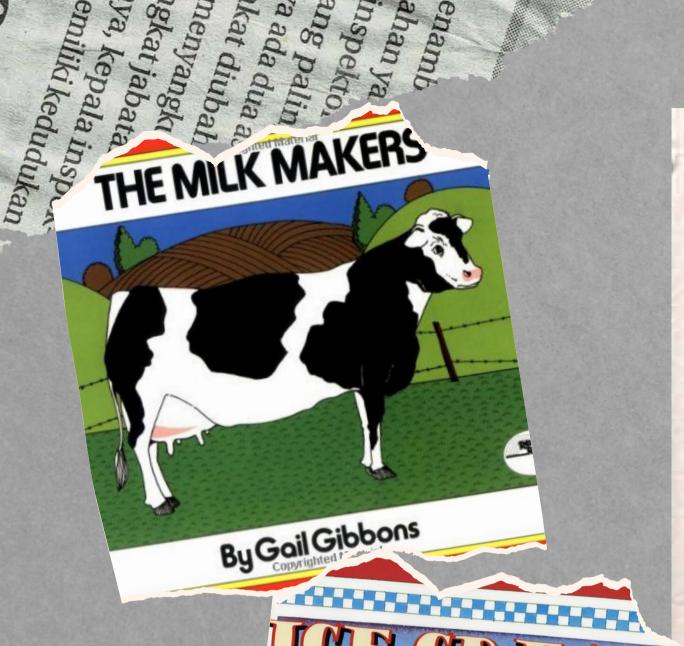


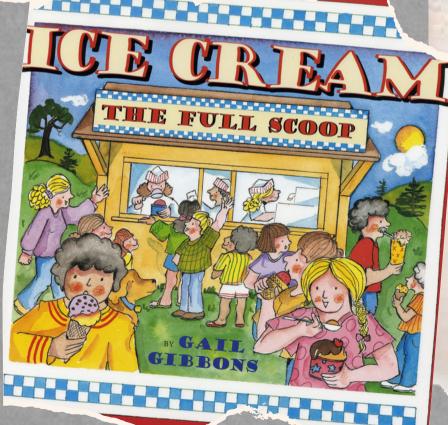
Gail Gibbons



Plant Parts Logic Puzzle







Gail Gibbons



whereismymilkfrom.com

So where is your milk from?

Milk Plastic

John Sandford

emiliki kedudukan

ya, kepala inspek.

gkat jabatan stru

nenyangkute,

kat diubah

a ada dua as

inspelato,

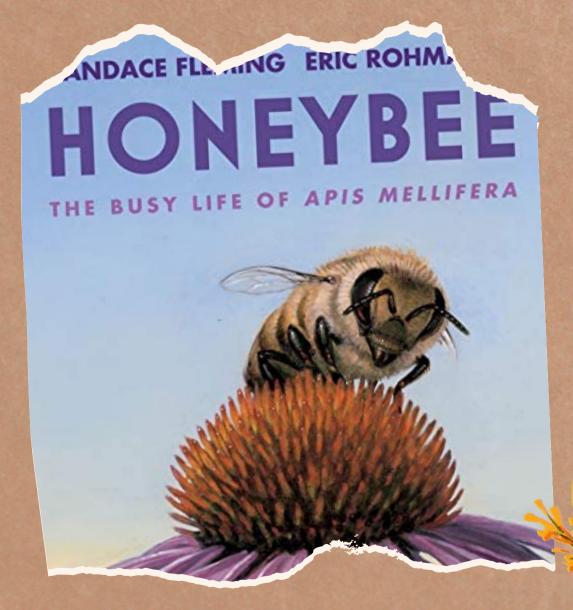
ahan ya



A Windy Lift







Candace Fleming



Powder-Powered Pollination



Throw and Grow

Paymond Bial

miliki kedudukan

Pa, kepala inspek.

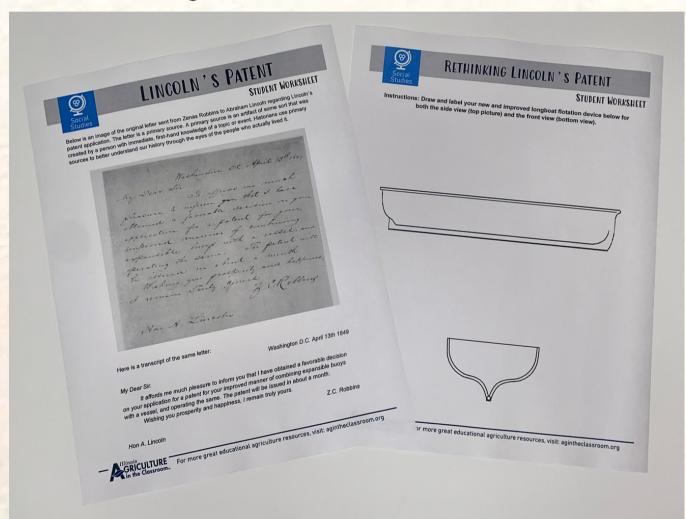
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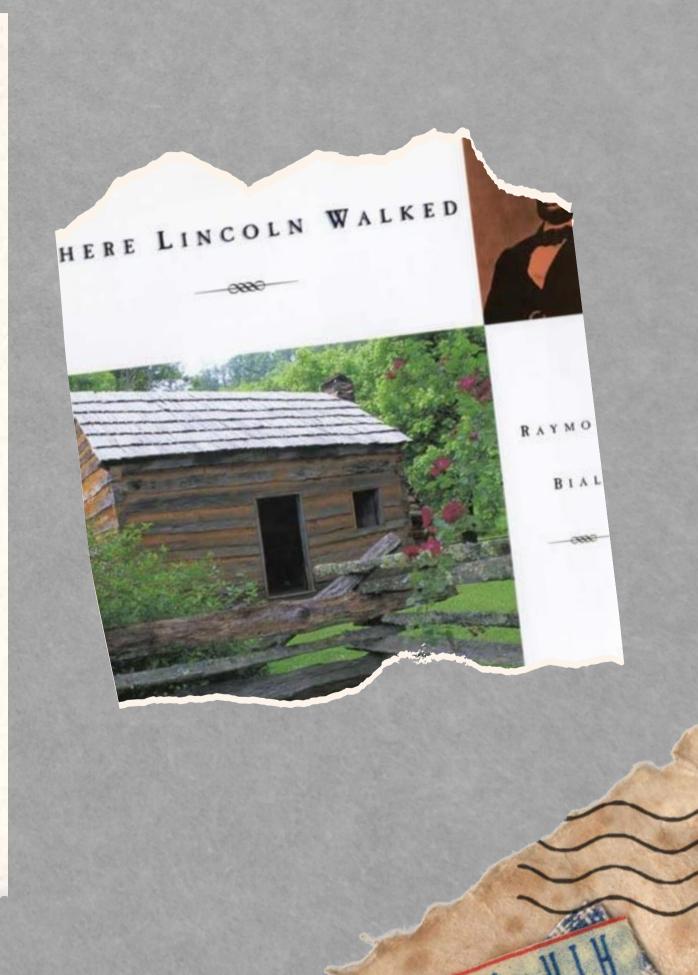
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nspekto,

than ya



Lincoln's Patent



Raymond Binl

When tillage begins, other arts follow. The farmers, therefore, are the founders of human civilization.

-Daniel Webster, 1840

iliki kedudukan

kepala inspek-



A cloak of loose, soft material, held to the earth's hard surface by gravity, is all that lies between life and lifelessness.

-Wallace H. Fuller, 1975

Essentially, all life depends on the soil...There can be no life without soil and no soil without life: they have evolved together.

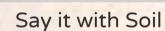
-Charles E. Kellogg, 1938

We are part of the Earth and it is part of us. What befalls the Earth befalls al sons of the Earth.

-Chief Seattle, 1854



Soil Sam

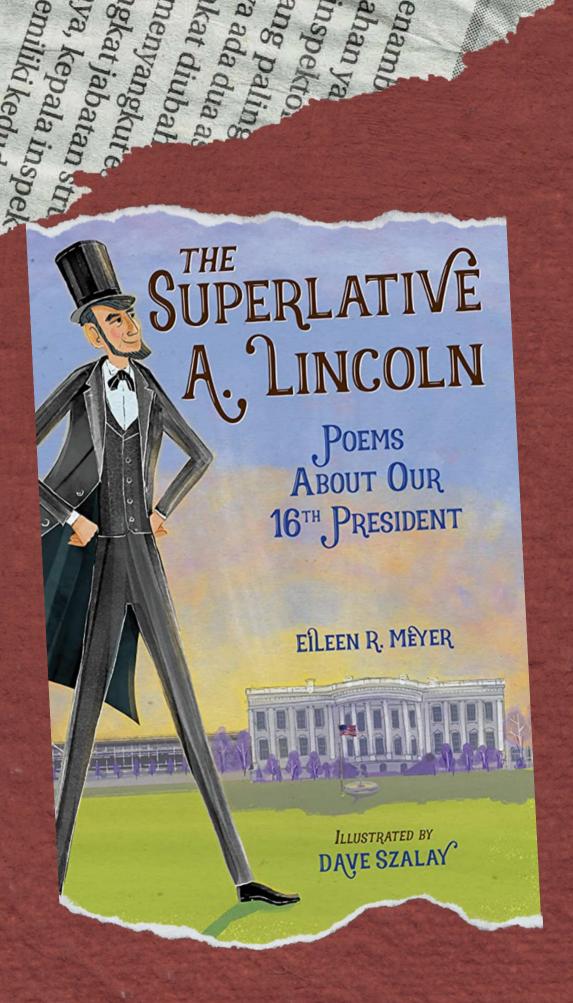






Play-Doh Core Sampling





ahan ya

Eileen Meyer



Ode to an Onion



Paricia Ton



Pumpkin Catapult

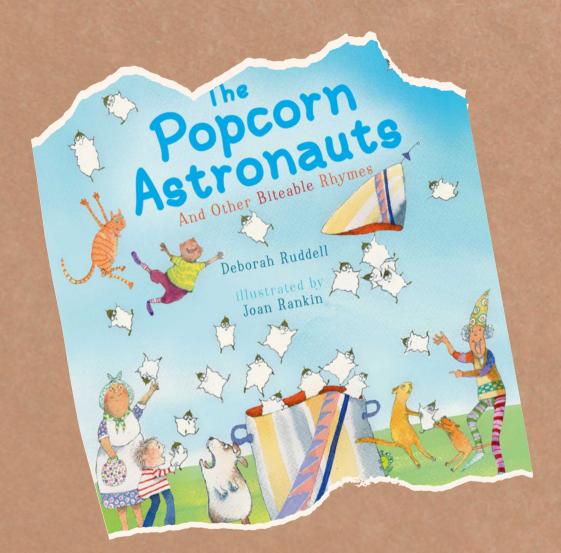


3D Pumpkin



Pumpkin Pie in a Bag





Deborah Puddell



POPCORN SCIENCE

Grade Level

Length of Lesson

45 minutes

By the end of this lesson by the end of this lessuri, students will have a better understanding of the scientific concepts of volume and physical change.

Materials Needed

- Popcorn kernels
 32oz. Mason jars*
- Microwave Scales Masking tape
- Marker Copies of the student worksheet

CCSS.ELA-CCSS.ELA-Literacy.W.4.8; W.5.2A; W.6.1A-B; RST.6-8.3; RST.6-8.7

NGSS MS-PS1-4

Lesson Summary
This lesson is a fun, hands-on activity designed to introduce students to the concept of volume and physical change while strengthening their understanding of weight.

*Any clear container will work, just adjust the amount of popcorn/

kernels you're using.

Suggested Sequence of Events:

1. Set Up: Pop enough popcorn so that each group of students has Set Up: Pop enough popcorn so that each group or students has 100 popped popcorn pieces.
 Read through the IAITC Corn Ag Mag to learn more about other products that come from corn! Interactive online versions can be

- products that come from corn! Interactive online versions carefound on our website.

 Complete the activity following the procedures:

 Give each group two Mason jars. Have them use the masking tape and marker to label one jar "A" and the masking tape and marker to label one jar "A".
 - other jar "B".
 Give each student a copy of the student worksheet and read through the background information and the

 - read through the background information and will read through the background information and will directions together.

 Have them weigh each jar using a scale and record the weight on their student worksheet.

 Sive students a cup of un-popped popcorn kernels and have them count out 100 kernels and add all 100 kernels to jar "A".

 Re-weigh jar "A" and record the weight.

 Give each group a bunch of popped popcorn and have them count out 100 pieces. Have them add those 100 pieces to jar "B".

 Have them re-weigh jar "B" and record the weight.

 Once they are done recording the weights, have them answer the questions at the bottom of the sheet.
 - Whole class discussion and reflection of activity. Was there a 4. Whole class discussion and reflection of activity. Was there a difference in weight between the kernels and the popcorn (#3 on the transport of their student worksheets)? Why would the kernels weigh slightly more if the popped popcorn pieces are bigger and have more worksheets?



Packing Peanuts



Tillinois
GRICULTURE
For more great educational agriculture resources, visit: agintheclassroom.org Popcorn Science

Alice Mating

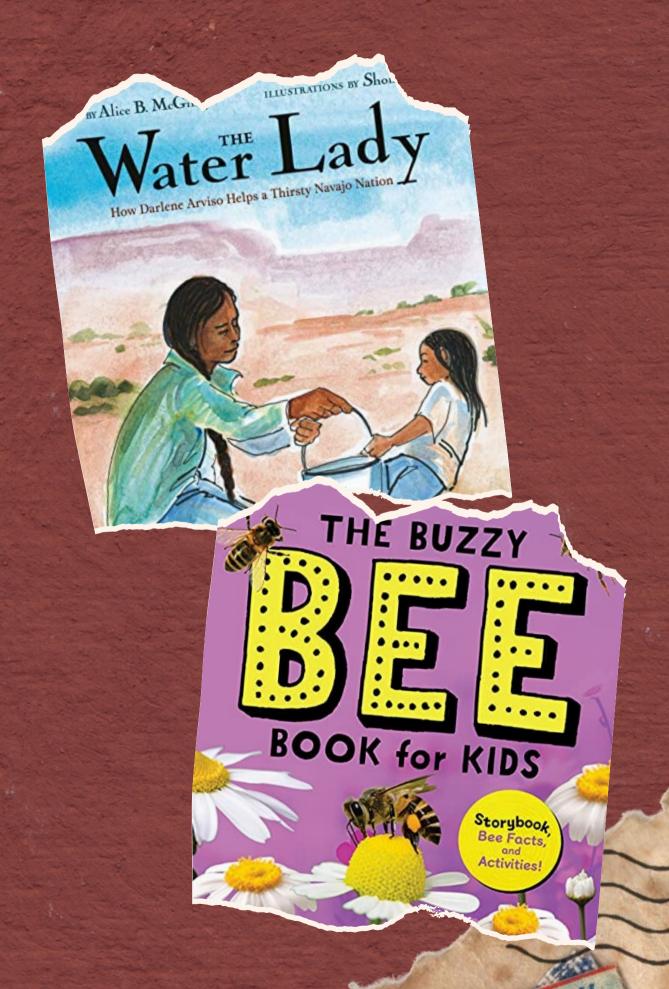
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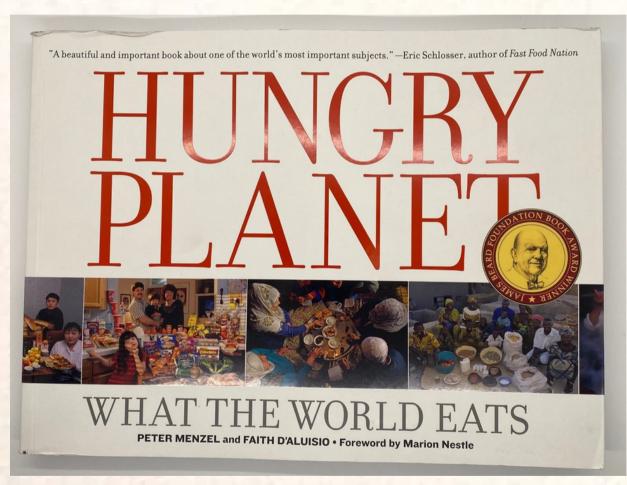


Water Cycle in a Bag

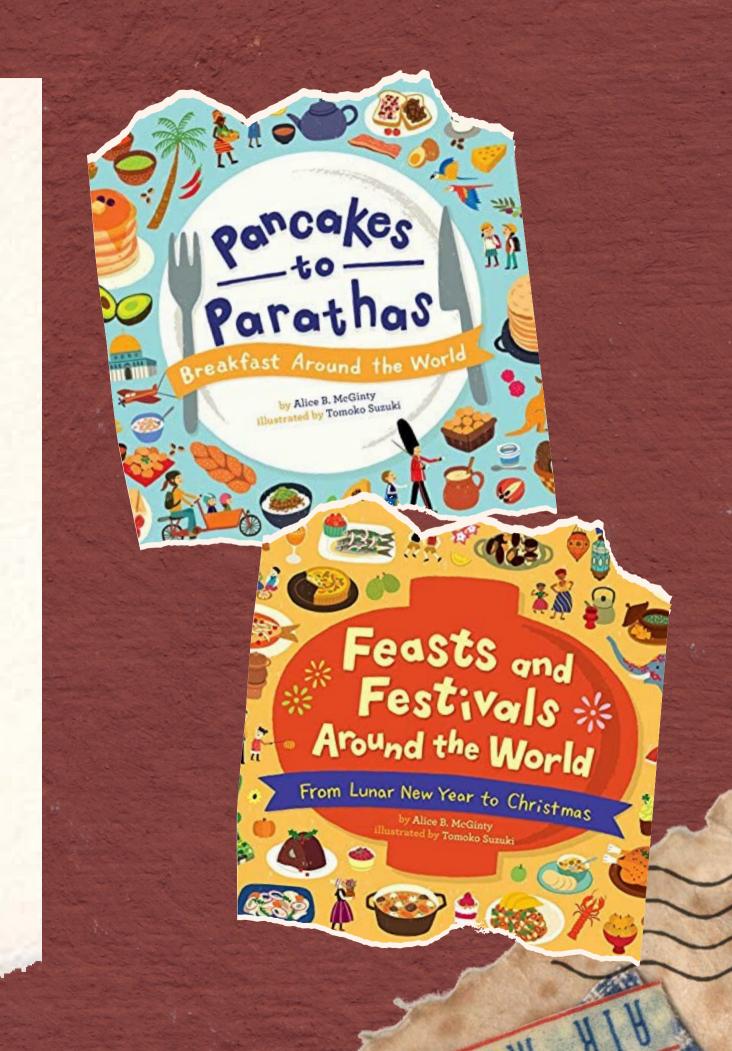


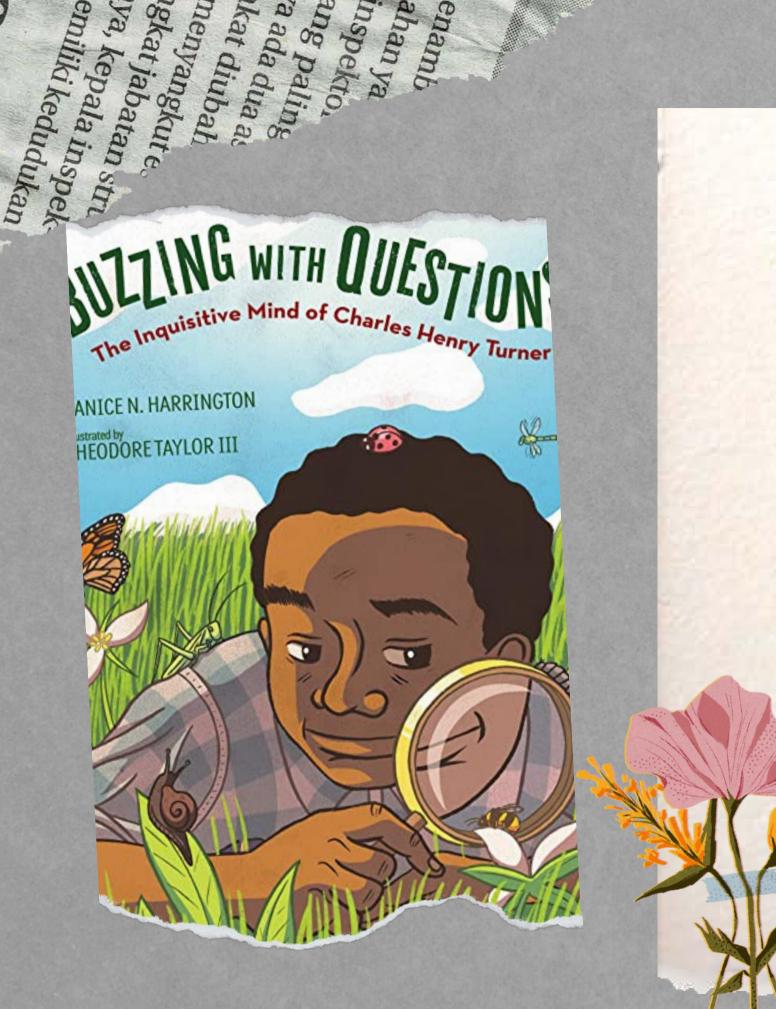
Alice Maging

nenyangkute,

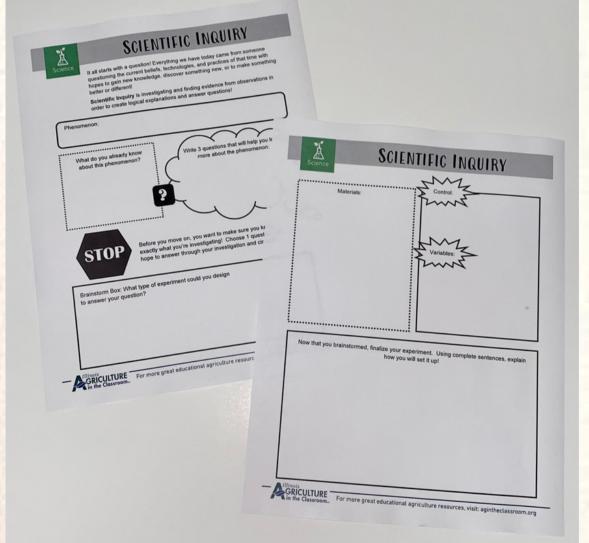


Hungry Planet

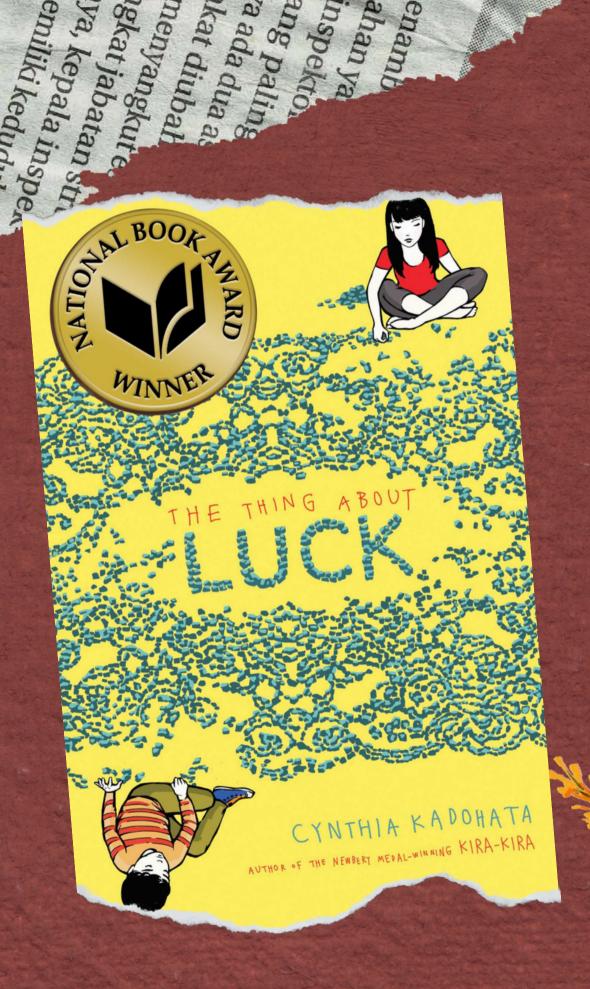




Panice VI. Harrington



Scientific Inquiry Worksheet



Cynthia Kadonala



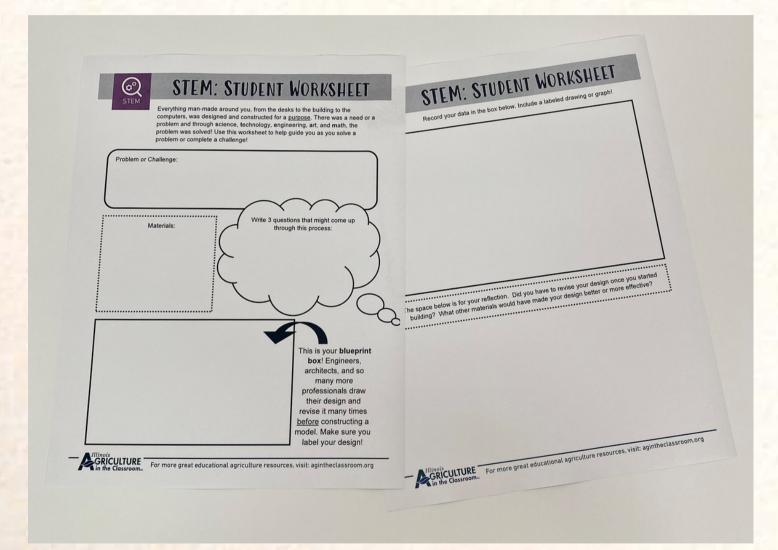
Wheat Milling

ahan ya inspekto, ang paling a ada dua as ikat diubah Suzanne Slade

emiliki kedudukan

lgkat jabatan stri

nenyangkute,



STEM Student Worksheet

