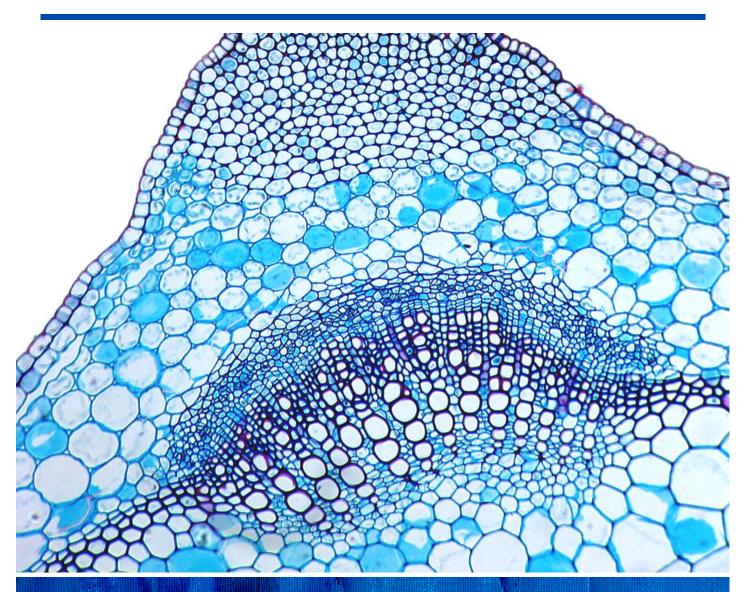
STEAM ACTIVITY KITS

United 21st Century Community Learning Centers



INSIDE THIS ISSUE

These kits were created in partnership with St Cloud State University and Great River Regional Library to address learning gaps by grade level as evidenced by data within our local school districts. These activities will give your students a fun way to close this gap.

Fall 2021 Edition

UNITED 21ST CENTURY COMMUNITY LEARNING CENTERS

A community-wide collaborative which builds on the partnerships of multiple organizations to support students' needs before, during, and after-school in ways that matter most to our community. Based on the collective impact model, research of Partner for Student Success, and a diverse group of community partners, this grant specifically focuses on the following local student needs:

- · High-quality out-of-school time programming for students eligible for free or reduced meals
- Positive identity, with a specific focus on students that self-identify as African American students of slave descent
- · Literacy development, with a specific focus on students with a home language other than English
- · Meaningful family engagement

Grant partners align programming, resources, and professional development to support student and family needs based on a data-driven approach which identifies root causes, and leverages and develops proposed solutions according to student needs. This takes place within the context of continuing program improvement and a collective impact approach.

















YOUTH





















The UNITED 21CCLC collaborative includes a network of centers and satellite centers across two school districts and several communities in central Minnesota. It leverages and builds upon the experience and commitment of partners, including our community's library system; national youth serving organizations; community-based organizations; university system; Central Minnesota's largest healthcare provider; school districts and schools. Through these partners, this collaborative is developed with the voices and representation of the community.

This catalog has been funded in part with federal funds the U.S. Department of Education, Nita M. Lowey 21st Century Community Learning Centers grant program. Any products mentioned are only examples and do not constitute endorsement by the U.S. government.the community.

LIST OF ACTIVITY KITS

Makerspace Activity Kits

Circuit Challenge Kit	6
Code-a-Pillar Kit	6
LEGO Challenge Kit	7
Make.do Kit	7
Marble Run Kit	7
Mouse Maze Kit	8
Snap Circuit Kit	8
All-in-One Kit	9
Coding Board Game Kit	0
Mada amadica Activity Vita	
Mathematics Activity Kits	
Adding & Subtracting Dice Kit	
Area of Shapes Kit	
Bar Graph Thumb Data Kit	
But That's Not Fair	
Compare Me Kit	
Counting Coins Kit	
Creating Nets: Surface Area Kit	
Draw Me a Number Kit	
Equivalent Numerical Expression Kit	13
Estimating Irregular Figures Kit	13
Flip It! Kit	13
Fraction Kit	13
Fraction Domino Kit	14
Fraction Fun Kit	14
Fraction-O Kit	14
Fractions of a Group Kit	14
Fractions to Decimals Kit	15
GCF LCF & Fractions Kit	15

LIST OF ACTIVITY KITS

Mathematics Activity Kits (continued)

Graphing the Odds Kit	15
How Tall Am I? Kit	15
'm Bigger Than You! No, I Am! Kit	16
nequalities Kit	16
t's All About Placement Kit	16
Lines & Shapes Kit	16
Multiplication & Division in the Wild Kit	17
Oh, The Places You'll Roll Kit	17
Pom Pom Patterns Kit	17
Properties of Addition & Multiplication Kit	17
Share the Beads Kit	18
Sum It Up Kit	18
Taking Up Space: Part 1 Kit	
Transformation Finder Kit	
Volume of Rectangular Prisms Kit	
What is the Missing Piece? Kit	19
What's Your Order? Kit	19
Which is Taller? By How Much? Kit	20
Science Activity Kits	
Animals & Habitats/How Do Penguins Stay Dry While Swimming Kit	21
Behavioral Observation/Daubenmire Habitat/Concentrations Kit	21
Body System Cootie Catcher/Cell City Kit	21
Cabbage PH Indicator Kit	21
Chemistry in a Bag Kit	22
DNA Extraction Kit	22
DNA Model Kit	22

LIST OF ACTIVITY KITS

Science Activity Kits (continued)

DIY Soil Test Kit	22
Earth's Seasons & Heating Kit	23
End Table Challenge Kit	23
Flood Rescue Kit	23
Laser Maser Kit	23
Let's Explore Infrared Radiation Kit	24
Lung Model Kit	24
Making Electric Circuits Kit	24
Measuring Infrared Radiation Kit	24
Motor Boat Kit	25
Plant-tastic Exploration/Mouse Trap Car Kit	25
Pocket Solar System Kit	25
Rainy Day Experiment/Pizza Box Solar Oven Kit	25
Scientific Process Kit	26
Sizing Up the Moon Kit	26
Snap Circuits Briefcase Kit	. 26
Sorting & Properties/Living v Nonliving Kit	26
Thermometer/Barometer Kit	27
To See or Not to See Kit	. 27
Water Bar Kit	27
Wind Energy Kit	27
Learning Concepts: Building on Learning	
Ideas for a Series Embedded into a Program	. 28

Makerspace Activity Kits

These kits were developed in partnership with Great River Regional Library.



Circuit Challenge Kit

Ages 8+

Combine logic and science for a fun, electrifying lesson in circuitry. Sixteen tokens snap into place in different combinations to complete the circuit and light the beacon. Challenge cards get you started by showing where to place your starter token, and then you figure out where to place the other tokens needed to complete the pattern (circuit).

One kit available.

Access Training Materials

Circuit Maze Set x 10



Code-a-Pillar Kit

Aaes 4+

Code-a-Pillar inspires little learners to be big thinkers by encouraging preschoolers to arrange (and rearrange) the easy-to-connect segments in endless combinations, sending Code-a-Pillar on his path. This learning toy encourages experimentation while developing important skills like problem solving, planning & sequencing and critical thinking

One kit available.

Access Training Materials



Code-a-Pillar Set x 10

Makerspace Activity Kits

These kits were developed in partnership with Great River Regional Library.



LEGO Kit

Ages 5+

LEGO materials are combined with challenge cards to provide unique prompts for young people to be inspired and create their own build. This is a very simple, easy prep activity kit with several levels of difficulty for young people of many grade levels.

Three kits available.

Access Training Materials



LEGO Set x 1



Make.do Kit

Ages 4+

Makedo is a cardboard construction kit that teaches kids through play to see the world not as it is but as it could be. Become a carpenter, artist, creator with paper!

Two kits available.

Access Training Materials



Make.do Set x 1



Marble Run Kit

Aaes 6+

A marble run is a form of kinetic art – an art form that contains moving pieces - that specifically involves one or more marbles competing in a race to win. Students explore the effects of gravity and inertia by building a marble track. Who can build a track that keeps the ball rolling for the longest time? Which wall will hold the history of record breakers?

Two kits available

Access Training Materials



✓ Marble Set x 1

Makerspace Activity Kits

These kits were developed in partnership with Great River Regional Library.



Mouse Maze Kit

Aaes 4+

Jack, the fully programmable robot mouse, is ready to follow commands to teach hands-on coding concepts! Create a step-by-step path for Jack using the 30 double-sided coding cards to provide the perfect introduction to coding concepts. Jack lights up, makes sounds, and features 2 speeds and colorful buttons to match coding cards for easy programming and sequencing.

Two kits available.

Access Training Materials





Snap Circuit Kit

Ages 8+

Snap Circuits® teaches basic engineering, electronics and circuitry concepts by using building components with snaps to assemble electronic circuits on a simple "rows-and-columns" base grid. The resulting projects function like the printed circuit board found in most electronic products. Each Snap Circuits® part is easily identifiable by a different color and purpose, and each kit includes an easy-to-follow project manual.

One kit available.

Access Training Materials



✓ Snap Circuit Set x 10

Makerspace Activity Kits

These kits were developed in partnership with Great River Regional Library.



Code & Go Robot Mouse

All-in-One Kit

Ages 4+

This kit combines several coding set favorites to engage young people in several options for learning and play! Students can strengthen their skills by applying learning in several ways across kits. This makes for a great station-based activity for several small groups.

Five kits available.



Circuit Maze Set



Clue Master Set



Code-a-Pillar Set



Code Master Set

Access Training Materials

- **☑** Botley Set
- ☑ Circuit Maze Set
- ✓ Clue Master Set

- **☑** Code Master Set



Botley Set



Code Hopper Set

Makerspace Activity Kits

These kits were developed in partnership with Great River Regional Library.











Little Codr Set

Coding Board Game Kit

Ages 4+

Access Training Materials

This kit combines several coding set favorites to engage young people in several options for learning and play! Students can strengthen their skills by applying learning in several ways across kits. This makes for a great station-based activity for several small groups.

One kit available.







Code Hopper Set



Mouse Mania Set



Code Master Set

Access Training Materials

- **☑** Code Master Set
- **✓** Little Codr Set
- ✓ Mouse Mania Set
- Qwirkle Set



Qwirkle Set

Mathematics Activity Kits

These kits were developed in partnership with St. Cloud State University Mathematics Education.



Adding & Subtracting Dice Kit
Grades 1+

One kit available.

Access Training Materials

Adding and Subtracting Dice Set x 10: Video Tutorial



Area of Shapes Kit

Grades 4+

One kit available.

Access Training Materials

Area of Shapes Set x 10: Video Tutorial



Bar Graph Thumb Data Kit

Grades 4+

One kit available.

Access Training Materials

☑ Bar Graph Thumb Data Set x 10: Video Tutorial



But... That's Not Fair

Grades 6+

One kit available.

Access Training Materials

☑ But... That's Not Fair x 10: Video Tutorial

Mathematics Activity Kits

These kits were developed in partnership with St. Cloud State University Mathematics Education.



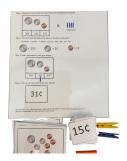
Compare Me Kit

Grades 1+

One kit available.

Access Training Materials





Counting Coins Kit

Grades 2+

One kit available.

Access Training Materials

✓ Counting Coins Set x 10: Video Tutorial



Creating Nets: Surface Area Kit

Grades 4+

One kit available.

Access Training Materials

☑ Creating Nets: Surface Area Set x 10: Video Tutorial



Draw Me A Number Kit

Grades K+

One kit available.

Access Training Materials

☑ Draw Me A Number Set x 10: Video Tutorial

Mathematics Activity Kits

These kits were developed in partnership with St. Cloud State University Mathematics Education.



Equivalent Numerical Expression Kit

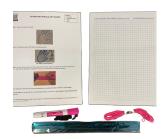
Grades 5+

One kit available.

Access Training Materials



Equivalent Numerical Expression Set x 10: Video Tutorial



Estimating Irregular Figures Kit

Grades 6+

One kit available.

Access Training Materials



✓ Estimating Irregular Figures Set x 10: Video Tutorial



Flip It! Kit

Grades 2+

One kit available.

Access Training Materials



Flip It! Set x 10: Video Tutorial



Fraction Kit

Grades 4+

One kit available.

Access Training Materials

Fraction Kit Set x 10: Video Tutorial

Mathematics Activity Kits

These kits were developed in partnership with St. Cloud State University Mathematics Education.





Fraction Domino Kit

Grades 3+

One kit available.

Access Training Materials

Fraction Domino Set x 10: Video Tutorial



Fraction Fun Kit

Grades 3+

One kit available.

Access Training Materials

Fraction Fun Set x 10: Video Tutorial



Fraction-O Kit

Grades 5+

Two kit available.

Access Training Materials



Fraction-O Set x 5: Video Tutorial



Fractions of a Group Kit

Grades 3+

One kit available.

Access Training Materials

Fractions of a Group Set x 10: Video Tutorial

Mathematics Activity Kits

These kits were developed in partnership with St. Cloud State University Mathematics Education.



Fractions to Decimals Kit

Grades 4+

One kit available.

Access Training Materials

Fractions to Decimals Set x 10: Video Tutorial



GCF, LCF & Fractions Kit

Grades 6+

One kit available.

Access Training Materials



GCF, LCF & Fractions Set x 10: Video Tutorial



Graphing the Odds Kit

Grades 5+

One kit available.

Access Training Materials

Graphing the Odds Set x 10: Video Tutorial



How Tall Am I? Kit

Grades 2+

One kit available.

Access Training Materials



How Tall Am I? Set x 10: Video Tutorial

Mathematics Activity Kits

These kits were developed in partnership with St. Cloud State University Mathematics Education.



I'm Bigger Than You! No, I Am! Grades

One kit available.

Access Training Materials

☑ I'm Bigger Than You! No, I Am! Set x 10: Video Tutorial



Inequalities Kit

Grades 5+

One kit available.

Access Training Materials



It's All About Placement Kit

Grades 2+

One kit available.

Access Training Materials



Lines & Shapes Kit

Grades 3+

One kit available.

Access Training Materials

<u>✓ Lines & Shapes Set x 10: Video Tutorial</u>

Mathematics Activity Kits

These kits were developed in partnership with St. Cloud State University Mathematics Education.



Multiplication & Division in the Wild Kit

Grades 4+

One kit available.

Access Training Materials

Multiplication & Division in the Wild Set x 10: Video Tutorial



Oh, The Places You'll Roll Kit Grades 3+

One kit available.

Access Training Materials

Oh, The Places You'll Roll Set x 10: Video Tutorial



Pom Pom Patterns Kit

Grades K+

One kit available.

Access Training Materials

Pom Pom Patterns Set x 10: Video Tutorial



Properties of Addition & Multiplication Kit *Grades 6+*

One kit available.

Access Training Materials

✓ Properties of Addition: Video Tutorial

Properties of Multiplication: Video Tutorial

Mathematics Activity Kits

These kits were developed in partnership with St. Cloud State University Mathematics Education.



Share the Beads Kit

Grades 3+

One kit available.

Access Training Materials

Share the Beads Set x 10: Video Tutorial



Sum It Up Kit

Grades

One kit available.

Access Training Materials

Sum It Up Set x 10: Video Tutorial



Taking Up Space Kit

Grades 6+

One kit available.

Access Training Materials

▼ Taking Up Space: Part 1 Set x 10: Video Tutorial



Time for Us to Get a Clock Kit

Grades 1+

One kit available.

Access Training Materials

▼ Time for Us to Get a Clock Set x 10: Video Tutorial

Mathematics Activity Kits

These kits were developed in partnership with St. Cloud State University Mathematics Education.



Transformation Finder Kit

Grades 4+

One kit available.

Access Training Materials





Volume of Rectangular Prisms Kit

Grades 5+

One kit available.

Access Training Materials

✓ Volume of Rectangular Prisms Set x 10: Video Tutorial



What is the Missing Piece? Kit

Grades 2+

One kit available.

Access Training Materials

What is the Missing Piece? Set x 10: Video Tutorial



What's Your Order? Kit

Grades 6+

One kit available.

Access Training Materials

What's Your Order? Set x 10: Video Tutorial

Mathematics Activity Kits

These kits were developed in partnership with St. Cloud State University Mathematics Education.



Which Is Taller? By How Much? Kit Grades 2+

One kit available.

Access Training Materials

Which is Taller? By How Much? Set x 10: Video Tutorial

Science Activity Kits

These kits were developed in partnership with St. Cloud State University Education Department.



Animals & Habitats/How Do Penguins Stay Dry Kit Grades 1-2

One kit available.

Access Training Materials

Animals & Habitats Set, grades 1-2

How Do Penguins Stay Dry Set, grades 1-2



Behavioral Observation/Daubenmire Habitat/Concentrations Kit Grades 6-8

Two kits available.

Access Training Materials

Behavioral Observation Set

✓ Daubenmire Habitat Set

Concentrations Set

Body System Cootie Catcher/Cell City Kit Grades 6-8

Two kits available.



Access Training Materials

✓ Body System Cootie Catcher Set

Cell City Set

Origami Fetal Pig Set

DNA Origami Set



Cabbage pH Indicator Kit

Grades

Two kits available.

Access Training Materials

Science Activity Kits

These kits were developed in partnership with St. Cloud State University Education Department.



Chemistry in a Bag Kit Grades 6-8

Two kits available.

Access Training Materials



DNA Extraction Kit

Grades 6-8

Two kits available.

Access Training Materials

☑ DNA Extraction Set



DNA Model Kit

Grades 6-8

Two kits available.

Access Training Materials

DNA Model Set



DIY Soil Test Kit

Grades 6-8

Four kits available. Two kits available at each grade level.

Access Training Materials

▼ DIY Soil Test Kit

Science Activity Kits

These kits were developed in partnership with St. Cloud State University Education Department.



Earth's Seasons & Heating Kit *Grades*

---- kits available.

Access Training Materials



End Table Challenge Kit Grades

---- kits available.

Access Training Materials

End Table Challenge Kit



Flood Rescue Kit

Grades 6-8

Two kits available.

Access Training Materials



Laser Maze Kit

Ages 8+

Two kits available.

Access Training Materials

✓ Laser Maze Set

Science Activity Kits

These kits were developed in partnership with St. Cloud State University Education Department.



Earth's Seasons & Heating Kit *Grades*

---- kits available.

Access Training Materials

Earth's Seasons & Heating Set



End Table Challenge Kit Grades

---- kits available.

Access Training Materials

End Table Challenge Kit



Flood Rescue Kit

Grades 6-8

Two kits available.

Access Training Materials

Flood Rescue Set



Laser Maze Kit

Ages 8+

Two kits available.

Access Training Materials

✓ Laser Maze Set

Science Activity Kits

These kits were developed in partnership with St. Cloud State University Education Department.



Let's Explore Infrared Radiation Kit Grades 5-6, 7-8

Four kits available, two at each grade level.

Access Training Materials

✓ Let's Explore Infrared Radiation Set



Two kits available.

Access Training Materials

Lung Model Set



Making Electric Circuits Kit *Grades 3-5*

Two kits available.

Access Training Materials

Making Electric Circuits Set



Measuring Infrared Radiation Kit *Grades 3-4*

Two kits available.

Access Training Materials

Measuring Infrared Radiation

Science Activity Kits

These kits were developed in partnership with St. Cloud State University Education Department.



Motor Boat Kit

Grades 6-8

Two kits available.

Access Training Materials

Motor Boat Set





Two kits available.

Access Training Materials

Mouse Trap Car Set

✓ Plant-tastic Exploration Set



Pocket Solar System Kit *Grades*

Two kits available.

Access Training Materials

Pocket Solar System Set





Rainy Day Experiment/Pizza Box Solar Oven Kit Grades 6-8

Two kits available.

Access Training Materials

Rainy Day Experiment Set

Pizza Box Solar Oven Set

Science Activity Kits

These kits were developed in partnership with St. Cloud State University Education Department.



Scientific Process/Sizing Up The Moon Grades

Two kits available.

Access Training Materials

Sizing Up the Moon Kit

Scientific Process Set



Snap Circuits Briefcase KitAges 8+

Eight kits available.

Access Training Materials

Sorting & Properties/Living v. Nonliving Kit Grades K-2



Two kits available.

Access Training Materials

Sorting & Properties Set

✓ Living v. Nonliving Set

Science Activity Kits

These kits were developed in partnership with St. Cloud State University Education Department.

Thermometer/Barometer Kit

Grades 6-8

Two kits available.

Access Training Materials

▼ Thermometer/Barometer Set





To See or Not to See Kit

Grades 6-8

Two kits available.

Access Training Materials

▼ To See or Not to See Set



Water Bar Kit

Grades

Two kits available.

Access Training Materials

✓ Water Bar Set



Wind Energy Kit

Grades 6-8

Two kits available.

Access Training Materials

Wind Energy Set

