

The background is a watercolor-style illustration of a galaxy or nebula. It features soft, blended washes of colors including light blue, pink, orange, and grey. Scattered throughout are various celestial objects: small grey spheres, larger orange and red spheres, and a prominent large orange sphere on the right side. The overall effect is ethereal and artistic.

**First Grade**

***Base Ten Progression***  
***Bernice Young Elementary***

**Haleigh Dennis, Faith Bright, Melissa Winn, Ellie Summers**

**K-12 teaching mentors: Lilly Dickard and Alicia Mooreland**

The slide features decorative watercolor splashes in the corners. The top-left corner has a dark blue/black splash, a yellow/orange splash, and a small globe. The top-right corner has a red splash, a small globe, and a brown splash. The background is a light cream color.

# *Project Introduction*

We are Pre-service Teachers taking the college course *Survey of Math Structures II*. We are conducting an EMPACTS project in which we are asked to take what we are taught and teach it to a classroom of students using technology. The project includes developing a lesson plan based on Arkansas standards, teamwork, time management, classroom management, using tech and reporting our experience.

# Team Photo



Spring 2023 EMPACTS Project  
Math Structures II, Dr. Marjorie Whitmore  
Northwest Arkansas Community College  
Bentonville, AR 72712



## ***Focus Standards:***

- 1.NBT.C.4- Add within 100 using concrete models or drawings, relate the strategy used to a written expression or equation, and be able to explain the reasoning.
- 1.NBT.C.5- Mentally find ten more or ten less than a given two-digit number, without having to count.

## ***Supporting Standards:***

- 1.OA.C.6- Add and subtract within 20, demonstrating computational fluency for addition and subtraction within 10.



# *Lesson Objectives*

- Knowing how to add and subtract numbers within 10.
- Working through value progression by **tens, fives, and twos.**
- Understanding how to count within the **100's chart.**





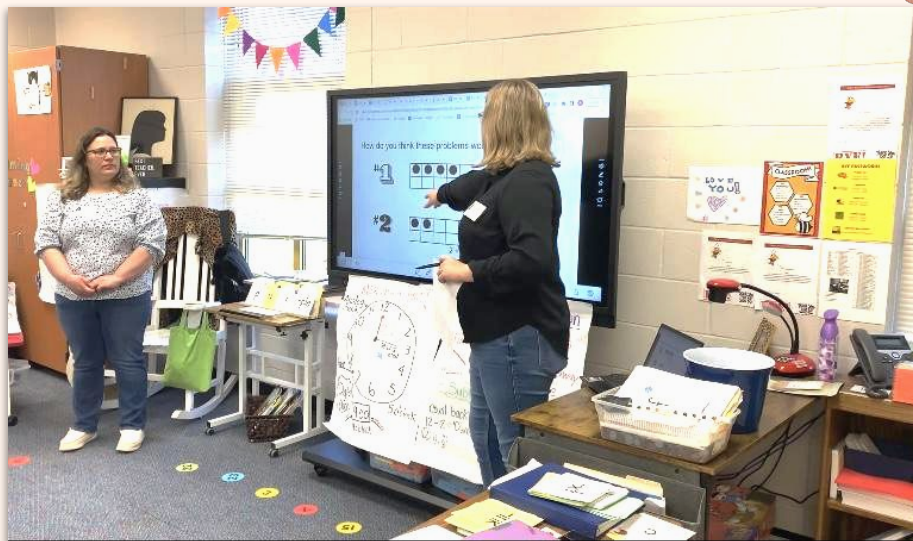
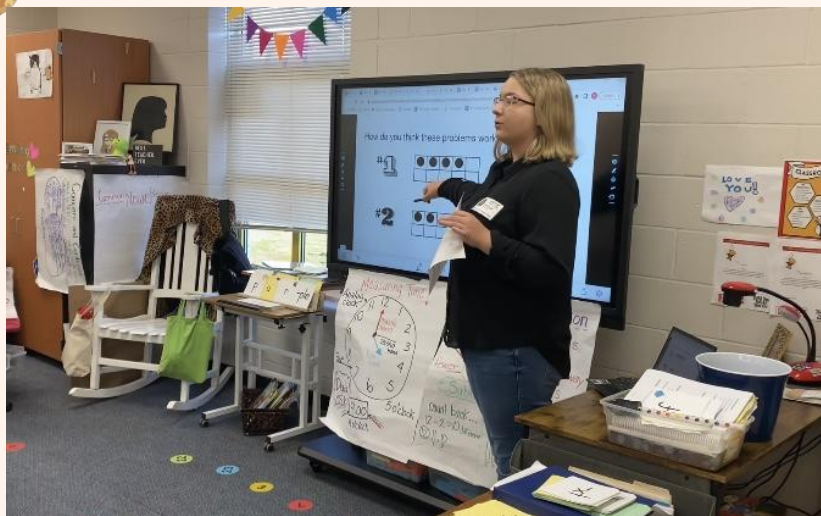
# *Lesson Procedure and Activities*

We had three activity worksheets planned for our lesson time, where each of us had to present the activity to the class and teach the content.

Worksheet names:

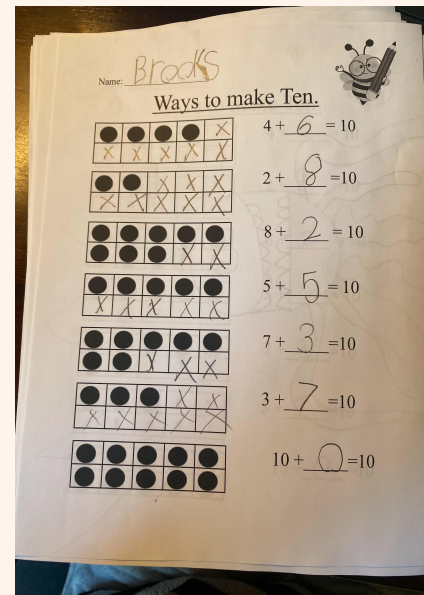
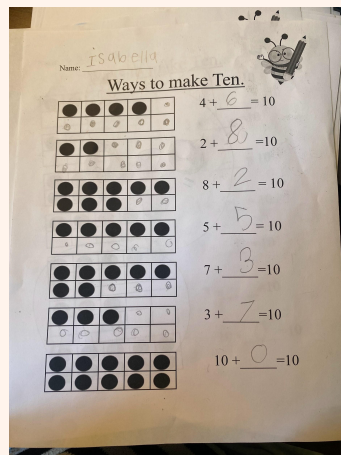
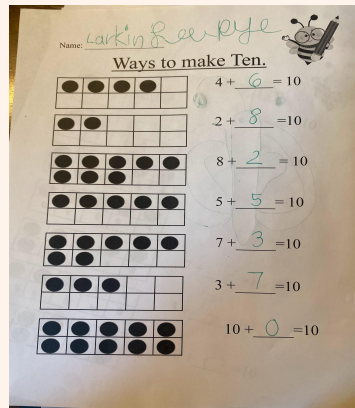
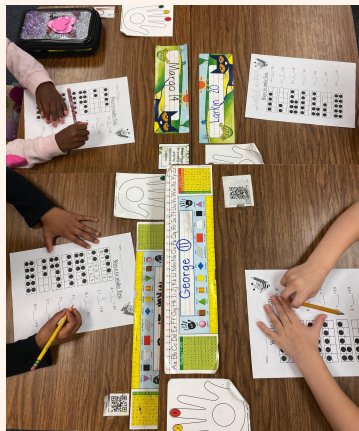
1. **“Ways To Make Ten”**- Individual student work.
2. **“Skip Count Path”**- Small group work with 3-4 student table groups.
3. **“Fishin’ For Digits”**- Group work as a class.

# *Instructional Images of “Ways to Make ten”*



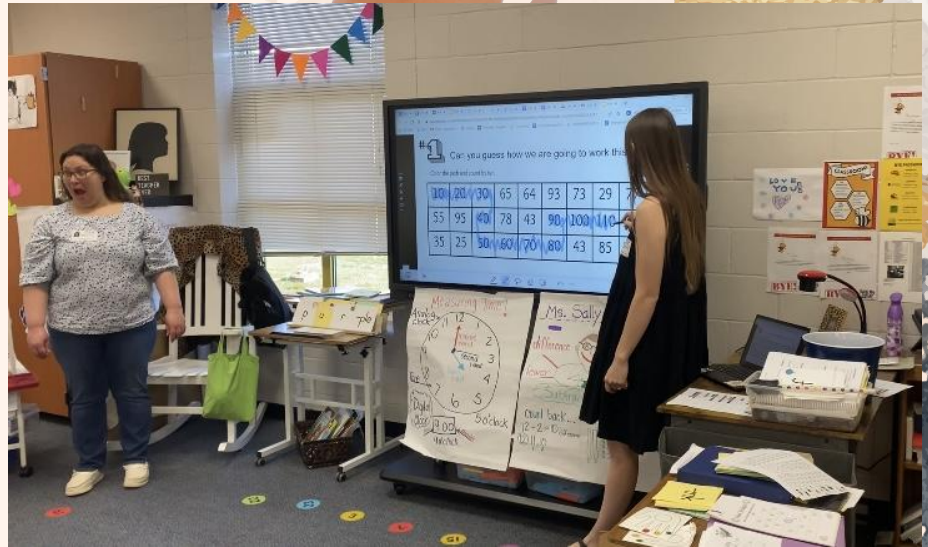
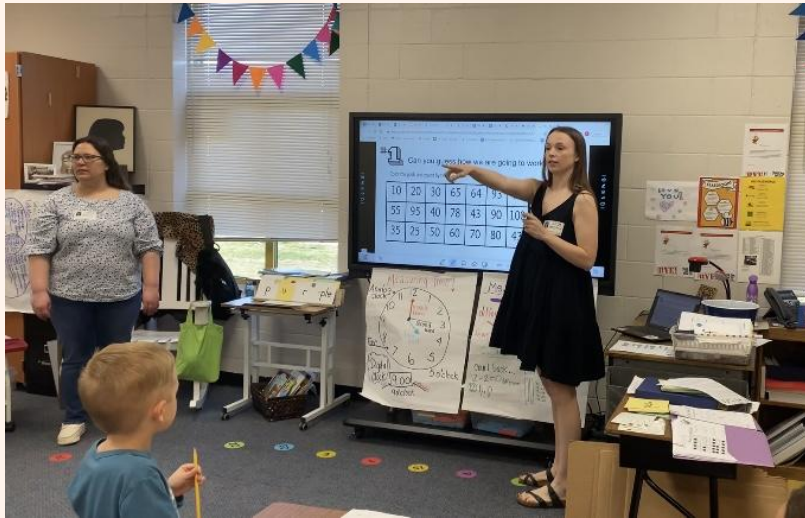


# Project Results for "Ways to Make Ten"

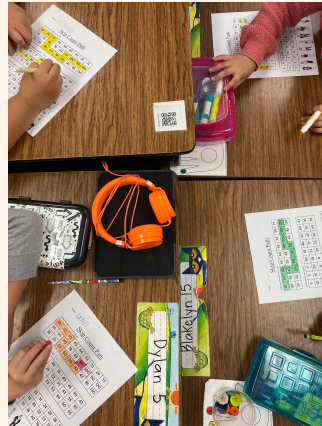




# Instructional Images of “Skip Count Path”



# Project Results for "Skip Count Path"



Name: coop

### Skip Count Path

Color the path and count by ten.

10	20	30	65	64	93	73	29	77
55	95	40	78	43	90	100	110	120
35	25	50	60	70	80	43	85	130

Color the path and count by five.

5	9	7	30	35	40	45	50	42
10	15	20	25	22	77	43	55	95
7	4	6	8	33	53	86	60	65

Color the path and count by two.

2	4	6	8	19	33	31	24	26	28	30
9	5	9	10	12	14	85	22	23	55	32
7	3	11	19	18	16	18	20	19	67	34

Name: Margo

### Skip Count Path

Color the path and count by ten.

10	20	30	65	64	93	73	29	77
55	95	40	78	43	90	100	110	120
35	25	50	60	70	80	43	85	130

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7	3	11	19	18	16	18	20	19	67	34

Name: Ponyor

### Skip Count Path

Color the path and count by ten.

10	20	30	65	64	93	73	29	77
55	95	40	78	43	90	100	110	120
35	25	50	60	70	80	43	85	130

Color the path and count by five.

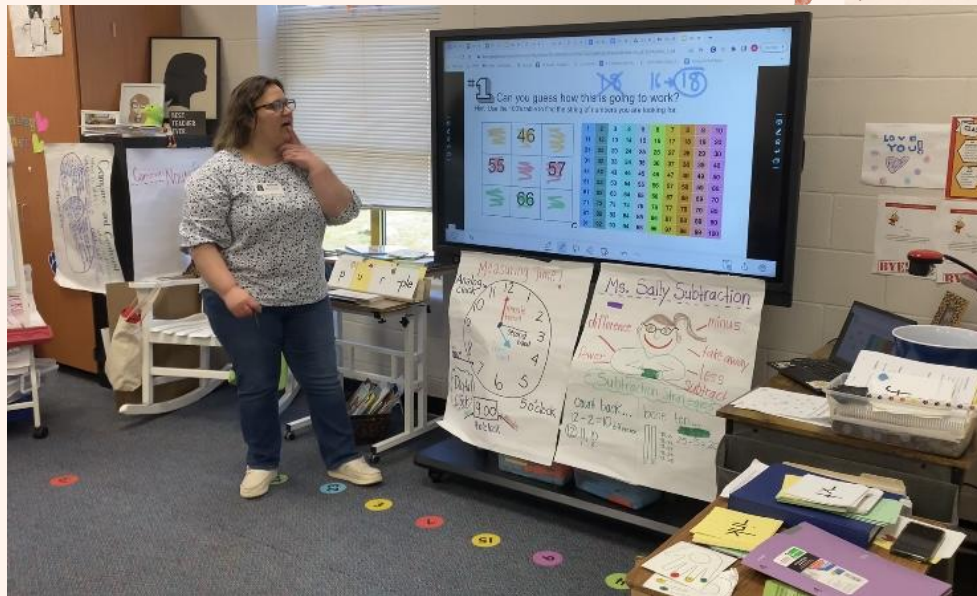
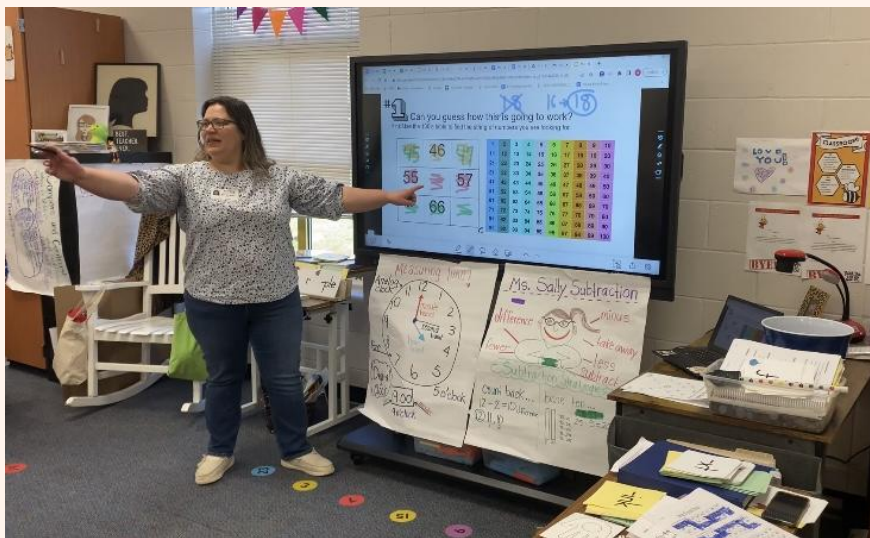
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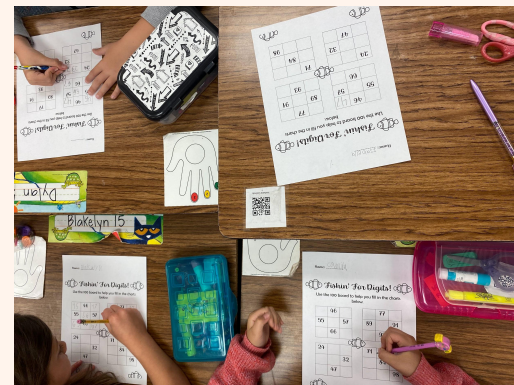
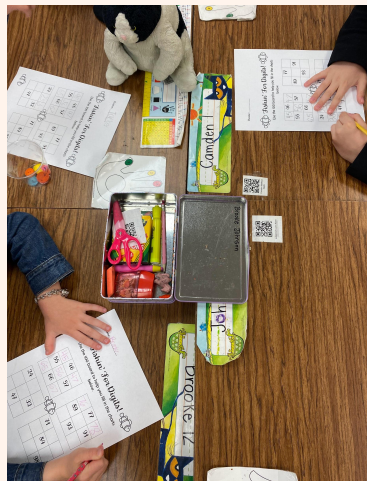
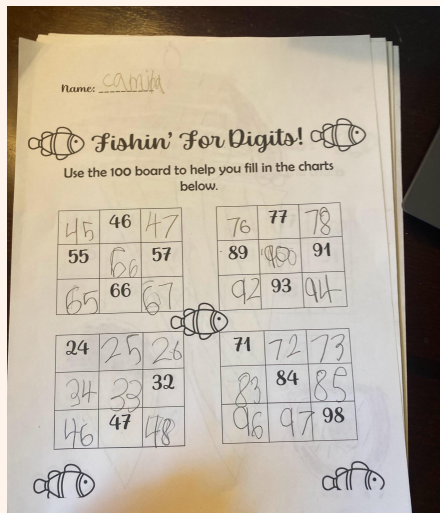
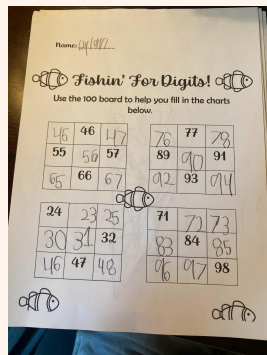
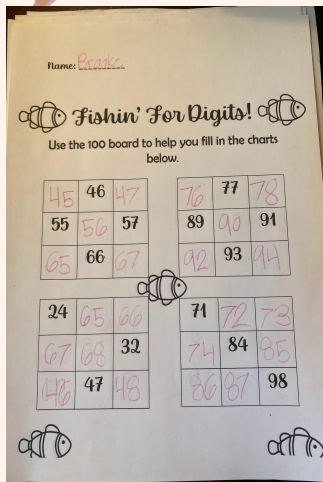
2	4	6	8	19	33	31	24	26	28	30
9	5	9	10	12	14	85	22	23	55	32
7	3	11	19	18	16	18	20	19	67	34



# Instructional Images of "Fishin' for Digits"



# Project Results for "Fishin' for Digits"







Extra Links:

***Here is a link to our class lesson video footage:***

- [https://drive.google.com/file/d/1vzqXfef9H-LQHJFnHi1lSBEezF9Y-pqA/view?usp=share\\_link](https://drive.google.com/file/d/1vzqXfef9H-LQHJFnHi1lSBEezF9Y-pqA/view?usp=share_link)

***This is our class lesson powerpoint:***

- <https://docs.google.com/presentation/d/1EqFjvXbxC7N-hP0kWfluocPrfc0DStyZ6uMHaCnPtaI/edit?usp=sharing>

# ***What did you learn from your teaching experience?***

We all had a great time being in the classroom. The children were very excited to have new teachers in class for the morning. They were all awesome students to work with! They listened to our instructions, sat while we taught, and were excited for what was next. Our activities could have been a little more challenging for our students. Although our mentor teacher, Alicia Mooreland, let us know that our activities were an awesome way to see where her students were at understanding base ten progression.





# *College Curricular Goals*

This project fulfills the requirements for the course of study and the EMPACTS program.

Learning Outcome for the course per the syllabus: "Prepare and present core mathematics lessons using some form of technology that can be incorporated into the EMPACTS program and/or submit an independent research project that incorporates technology."




# Products of Learning Experience

## *Teaching skills:*

- **Classroom management**–Clear instruction of each worksheet and clear expectations, tables were cleared of any distractions, materials needed were provided or accessible. Raised hands were addressed.
- **Time management**– We used the back of the worksheets to create artwork using a number as a base. This allowed students more time to work while those already finished kept busy. We kept an eye on our time making sure we had time for all three assignments.
- We assessed the students' learning by walking around the classroom while they worked on their worksheets. For the third assignment we had the students come to the smartboard one at a time to demonstrate their knowledge as a review.

## *Empacts skills:*

- 
- **Teamwork**– As a team of four, we each brought our skills into play for this project. Making sure we each played our part in producing a finished project.
  - **Problem solving**– When a problem arose another member of the team would step up. It was amazing working with team members that showed up for each other.
  - **Time management**– Time management was our biggest struggle. Trying to find time that four busy individuals had available was quite hard! We overcame this dilemma with the use of technology and delegating out meetings and using google Drive so we could all work on the Final Presentation
  - **Communication**– Our main source of communication was our telephones and minutes before or after our classroom time.
  - **Use of technology**– Google drive was a huge help in the presentation and sharing documents. In the classroom we used the smartboard to display the worksheets for easy review and demonstrations.





# *Products of Learning Experience*



## *Lesson plan:*

[https://docs.google.com/document/d/1WSkApEE0N5zf8\\_ot3xPZI-ZI8qCWFITm/edit?usp=sharing&oid=104917532004165862236&rtpof=true&sd=true](https://docs.google.com/document/d/1WSkApEE0N5zf8_ot3xPZI-ZI8qCWFITm/edit?usp=sharing&oid=104917532004165862236&rtpof=true&sd=true)

## *Worksheet 1:*


[https://docs.google.com/document/d/1xVa\\_YrcyDQWsezVbwFgSI5CGA9\\_77iEP/edit?usp=sharing&oid=104917532004165862236&rtpof=true&sd=true](https://docs.google.com/document/d/1xVa_YrcyDQWsezVbwFgSI5CGA9_77iEP/edit?usp=sharing&oid=104917532004165862236&rtpof=true&sd=true)

## *Worksheet 2:*

<https://docs.google.com/document/d/1lpvCl03HLouilvnuKInFOCPkdQTMUMgf/edit?usp=sharing&oid=104917532004165862236&rtpof=true&sd=true>

## *Worksheet 3:*

<https://docs.google.com/document/d/1Y60kkwplgizuWJcYsFI8QoGY09kNrx68/edit?usp=sharing&oid=104917532004165862236&rtpof=true&sd=true>



## *Share Your Experiences*

Going into the classroom and teaching was an eye opening experience. I realized that although I get nervous when starting a lesson, once I get into the rhythm of the lesson it gets a lot easier. I also picked up some of the tricks our teacher used on her students (waterfall call, hand signals, etc.). It was a great experience all around.

**-Faith Bright**

I actually really enjoyed this project. It was fun getting in the classroom and being able to learn in a hands-on way. I also think our group brought individual elements to this project that helped us succeed!

**-Ellie Summers**

I really enjoy going into the classroom! Doing this project as a team helped me gain ideas from other members on how to make activities more fun. Also gaining knowledge from a teacher who worked in the building was really great.

**-Haleigh Dennis**

This was a great experience in teamwork! Learning skills in teamwork will help me be a better teacher because it allows more opportunities for classroom enrichment.

**-Melissa Winn**

# *Acknowledgements*

- **Lilly Dickard**, who is an instructional facilitator at Bernice Young Elementary, was an amazing help on this project. She approved all of our worksheets and helped plan the lesson. Thank you Lilly!
- **Alicia Mooreland**, who was our first grade mentor teacher, was an awesome supporter of us! She allowed us into her classroom and let us in on her future lessons so we could work around her. Thank you Alicia!
- **Dianne Phillips**, who was our mentor teacher for this EMPACTS project. She guided us on materials and resources to help better our project. Thank you Dianne!

The background is a watercolor-style illustration of a celestial scene. It features various planets and moons in shades of orange, red, blue, and grey, scattered across a light cream-colored space. Some planets have rings, and there are smaller, dark spheres representing moons or smaller planets. The overall style is artistic and soft, with blended colors and some speckling.

***Thank You!***

pring 2023 EMPACTS Project  
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