

Innovate

3-5 IDEA Market Kit Unit 1

Overview

Learners will define what a problem is, and gain experience on problem-identification and problem-solving. Both individually and amongst their peers, learners will have opportunities to explore their passions, strengths, and skills. Learners will apply this knowledge to analyze and compile the resources and talents found within their classroom - to tackle any problem they may encounter!

3-5: Elementary Block Learners

English Language Arts

- Interactions Big Ideas: Expression, Exchanges, and Reception
- Reading Big Ideas: Vocabulary and Reading Comprehension
- Representations Big Idea: Composition

Mathematics

- Number Big Idea: Number Sense
- Statistics and Probability Big Idea: Data Analysis

Personal Wellness

• Mental Fitness - Big Idea: Decision-Making

Cross-Curricular Learning Activities

| 6 | | | | | | |
|--|---|--|--|--|--|--|
| Lesson | Materials Needed | | | | | |
| 1. Who Am I? and Who Are We? | PowerPoint Presentation, chart paper, markers, white paper (1 per learner), Who Am I? printable (1 per learner) highlighters, pencils, scissors, glue or clear tape, 1 copy of Pictographs or Bar Graphs Printable (3 copies, 1 per group), markers | | | | | |
| 2. <u>Big or Small: Problems and Solutions</u> | PowerPoint Presentation, Problem Cards (squares cut out, 1 per learner), Problem Picker Printable (4 copies) | | | | | |
| 3. Setting Goals: Knowing Our Why | Read Aloud: What Do You Do with A Problem? (By: Kobi Yamada), Blank Calendar Printable | | | | | |
| Time Considerations: 5-6 classes | | | | | | |

Lesson 1: Who Am I? and Who Are We?

<u>Around the Room</u>: Begin with writing Passion, Strength, and Skill, in large letters, on three separate pieces of chart paper. Place these charts around the room.



Next, ask learners to share what they know about each of these three words. Building upon the learners' responses, state the definitions from Slide # 2 of the PowerPoint Presentation:

Passion – a topic or interest that is so important to me, that it causes me to feel BIG emotions (anger, frustration, joy, or happiness)

Strength – something that I am naturally gifted at, and it is a part of who I am

Skill – something that I have spent many hours learning and practicing, and now, I could help others with it

Using the exemplars below (or your own), have learners identify if the example is a passion, a strength, or a skill, by standing beside the corresponding chart paper. Give learners multiple opportunities to match the examples with the definitions.

| Possible Passions: | | F | Possible Strengths: | | Possible Skills: |
|--------------------|---------------------|---|-----------------------|---|-----------------------|
| o Lit | ttering | 0 | Making people laugh | 0 | Music – sing, play an |
| o M | lanners | 0 | Listening for details | | instrument, dance |
| o Fo | ollowing | 0 | Public | 0 | Sports (stick |
| In | structions/Rules | | Speaking/Performing | | handling, catching a |
| o Po | overty | 0 | Multi-tasker | | ball, etc.) |
| o Cl | ean Drinking Water | 0 | Positive Attitude | 0 | Art – draw, paint, |
| o Er | ndangered Animals | 0 | Flexible | | sketch, visual media |
| o Re | ecycling | 0 | Problem-Solver | 0 | Math – numbers |
| о Н о | omelessness | 0 | Think Outside the Box | | (add, subtract, |
| o Po | ositive Mental | 0 | A Natural Leader | | multiple or divide) |
| He | ealth | 0 | Help Others Without | 0 | Writing or |
| o Ar | nti-Bullying | | Being Asked | | Storytelling |
| o Pe | eace | 0 | Patient | 0 | Fix broken things |
| o Lo | ove and Respect for | 0 | Self-Control/Self- | 0 | Speak what I am |
| Al | l People | | Discipline | | thinking clearly to |
| o Cl | imate Change | | | | others |

| | 0 | Video Gaming |
|--|---|----------------|
| | 0 | Baking/Cooking |

Who Am I? Reflection Exercise: With a piece blank paper, have learners draw, sketch, or write

as many passions, strengths, and skills that they know about themselves. After some time, have learners find a partner to share a few of their passions, strengths, and skills with. Emphasize that our *peers can sometimes see things in us that we don't see*, to encourage any learner struggling to find their passions, strengths, and skills. Choosing their favorite 1-2 Passions, Strengths, and Skills, have learners complete the *This Is Me!* printable (below) and follow the instructions on the page. Learners will add their own unique passions, strengths, and skills to the Charts that were used in the previous activity.



Who Are We? - Data Analysis: Gather and take time to examine the Passions Chart. State: "We



have a lot of information about each one of us here on this chart. It's now our job, to see what this information tells us about US – as a group. With that in mind, are there some passions that we share? What stands out to you?" With a highlighter, underline, or circle repeated passions, as learners discuss trends that they see.

Next, look over group strengths and skills. Count how many different strengths and skills are represented in the classroom. Compare results: "Are there more strengths or more skills?"

Examine the variety of both. Discuss: "Why would it be necessary for many different strengths and skills to be present in our group? What does this variety mean for us?"

Who Are We? - Data Organization:

Divide learners into 3 groups. Provide each group a bar graph printable (below) and have learners work together to create a bar graph representing the number of passions, strengths, and skills within their classroom. Review that each passion, strength, or skill is listed below the bottom line and the bar is drawn as high as needed to match the corresponding number of learners who have that passion, strength, or skill. Numbers listed vertically can be listed in 1s, 2s, or 5s. For an example, look at Slide #4.



Display the pictographs or bar graphs within the classroom for learners to use throughout the 3-5 IDEA Market Kit.

Lesson 2: Big or Small: Problems and Solutions

Big or Small or None At All: Using slide #5 of the PowerPoint, have learners share their own definition to the question: What is a problem? in small groups or elbow partners. Then, read

the definition together on Slide #6. In the same pairings, have learners identify which photographs on Slides #7 - 12 are BIG problems, small problems or not a problem at all. Have groups share their thinking.

Answer Key:

| Slide 7 – Plastic In Our Ocean | BIG |
|--|-------------------------|
| Slide 8 – A Broken Arm In The Summer | Small |
| Slide 9 – Bird & Puppy | NO Problem (Just Cute!) |
| Slide 10 – Not Getting Along with a Friend | Small |
| Slide 11 – A Broken Fingernail | Small |
| Slide 12 – A Large Forest Fire | BIG |

Now, using these BIG and small problems, give learners one of them (cut up from the printable below) and, on the back, have them brainstorm and sketch out a possible solution to it. After five minutes, have learners form groups based on their problem cards and share with each other possible solutions. Discuss: Which problems were the most difficult to solve and why?

Through whole-class discussion, reflect and share using Slide #13: What makes a problem BIG, small, or not a problem at all?

BIG

- Impacts many people
- Effects many things (environment, people, animals, future)
- Not one easy solution
- Feels hopeless to try to solve it
- Trying & Not Trying to solve it - can lead to more problems (complicated)

Small

- Impacts me and/or a small number of people
- Has a solution (and perhaps many different solutions)
- Quickly fixed
- May not be a problem again

None at All

- No obstacle
- Nothing to solve

Big

Small

Recharge and Reflect: Spend 10-15 minutes quietly walking the halls of your school, and weather permitting, quietly walking in your outdoor spaces. On this walk, have learners recharge and reflect on the big, small, and none-at-all problems of their school, and more broadly, their community. As they re-enter the classroom, display your town or city's local map on the Smart Board.

<u>Around the Room Problem-Picking:</u> On chart paper, allow learners to share the BIG and the small problems that they know about, or may be experiencing, within the school and/or within the community.

Examples: (so many more NOT listed here)

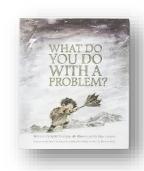
- Environmental: littering, lack of recycling, reducing waste, and reusing, pollution of water sources, endangered animals
- Safety: Crime, traffic in School Zones, Biking and ATV use, mobility access
- Relationships: Welcoming Newcomers, Respect for all, options for free and fun family activities, intergenerational opportunities
- Economy: lack of food, lack of affordable housing, lack of/too many employment opportunities, lack of public transportation
- Health: Positive Mental Health, options for outdoor and indoor wellness, encouraging and positive neighbourhoods

Once learners have exhausted their own lists, review the class data of passions, strengths, and skills. Discuss: Which problems are we most passionate about? Which are we most prepared to solve, looking at our strengths and skills?

Allow learners to choose a problem that they would like to try to solve individually, in partners, or in small groups. Have learners fill out the *Problem Picker Printable* (below) for each problem represented. Have groups or individuals share their problem.

Lesson 3: Setting Goals: Knowing Our Why

Read Aloud & Discussion: Discuss: Now, that we have a problem, what do we do with it? Allow learners to share their responses. Read the book: What Do You Do with a Problem? by Kobi Yamada. After reading, go back through the pages, observing the details of the illustrations, and allow learners another opportunity to SEE if anything happens to the "problem" in the story. Ask: How did the problem change in the story? Thinking of the problem we chose; how did this story inspire you?



Real Life Goals: Whether as a class, individuals, or small groups, have learners think about their problem with a different perspective. Say: Some of the problems that we identified and chose to try to solve, may take a lot of planning, a lot of work, a lot of patience, and a lot of determination not to quit. Problems can sometimes feel heavy and overwhelming. We may need to look at them in a different way. What has changed about this problem? Show Slide #14 and have students turn their heads upside to read its <u>shadow</u>. Our identified problem is now an <u>opportunity</u> to make a difference - to use our strengths and skills, to help others, and to move an obstacle out of the way.

On the back of the Problem Picker Printable, have learners determine the end goal. Guide: As we look at our chosen problem, we have the opportunity to ______? What would our end goal be? This is **why** we are doing this project. This is our **why**. Write the goal down. This will guide decisions needed to be made in the next unit.

<u>Calendar Goals:</u> Using the printable calendar (included below), or one that is already in your classroom, look ahead to the next 3-4 weeks. Review the days of the week, months of the year, and how to read a calendar. Mark down any important dates or special holidays. Though there is still much work to be done, determine a tentative goal date for the IDEA Market to happen in your classroom or school. This event will showcase the ideas and products created to help solve the problems chosen from this unit. Encourage students to replicate the class calendar to help keep organized, prepared, and staying on track (see printable below). Other dates will be added in future units.

Acknowledgements:

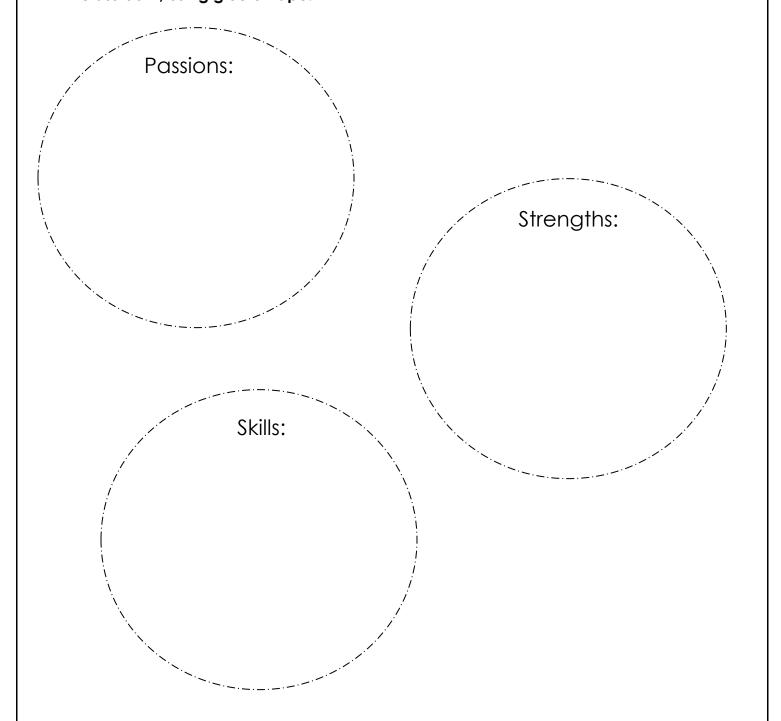
- 1. Definition of Problem. Kiddle Encyclopedia: <a href="https://kids.kiddle.co/Problem#:~:text=A%20problem%20is%20a%20situation,is%20called%20a%20a%20situation,is%20called%20a%20situation,is%20called%20a%20situation,is%20called%20a%20situation,is%20called%20a%20situation,is%20called%20a%20situation,is%20called%20a%20situation,is%20calle
- 2. Pictograph. Third Space Learning: https://thirdspacelearning.com/gcse-maths/statistics/pictograph/, London, 2023.
- 3. Bar Graph. Splash Learn: https://www.splashlearn.com/math-vocabulary/geometry/bar-graph, 2022.

Who Am I?



Name: _____

Once you draw and label, or write, your favorite 1-2 passions, strengths, and skills, cut out your circles and add them to the matching charts around the classroom, using glue or tape.



Our Bar Graph of



(Passions, Strengths, or Skills)

| <u> </u> | | | | <u> </u> | |
|----------|--|------|------|----------|--|
| | | | | | |
| | | | | | |

Numbers

Problem Cards



Cut out 1 per learner. On the back of the card, have learners sketch or write our how they would help solve the problem.



Plastic in Our Ocean



Plastic in Our Ocean



A Broken Arm in the Summer



A Broken Arm in the Summer





Not Getting Along With A Friend



A Broken Fingernail



A Large Forest Fire

Not Getting Along With A Friend



A Broken Fingernail



A Large Forest Fire

Problem Picker



Write/Sketch down the skills and strengths that THIS group of amazing learners have, to help solve this problem. Also add down any ideas to a possible solution!

Problem

Calendar Goals

First, fill in upcoming dates and events. Next, determine a date for your 3-5 IDEA Market Showcase – for when you will share your solution to your problem.

Centre of Excellence

| Month | Year |
|-------|------|

| SUN | MON | TUE | WED | ТНИ | FRI | SAT |
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