## Innovate

## K-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!

| K-2: Primary Block Learners | 3-5: Elementary Block Learners |
| :---: | :---: |
| English Language Arts <br> - Interactions - Big Ideas: Expression, Exchanges, and Reception <br> - Reading - Big Ideas: Vocabulary and Reading Comprehension <br> - Representations - Big Idea: Composition | English Language Arts <br> - Interactions - Big Ideas: Expression, Exchanges, and Reception <br> - Reading - Big Ideas: Vocabulary and Reading Comprehension <br> - Representations - Big Idea: Composition |
| Mathematics <br> - Number - Big Idea: Number Sense | Mathematics <br> - Number - Big Idea: Number Sense <br> - Statistics and Probability - Big Idea: Data Analysis |
| Explore Your World <br> - Well-Being - Big Idea: Belonging and Interconnectedness <br> - Diversity and Social Responsibility Big Ideas: Inclusiveness and Equity, Democratic Practices, and Sustainable Futures | Personal Wellness <br> - Mental Fitness - Big Idea: DecisionMaking |

## Cross-Curricular Learning Activities

## Lesson

1. Who Am I? and Who Are We?
2. Big or Small: Problems and Solutions

## Materials Needed

PowerPoint Presentation, chart paper, markers, This Is Me! 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, Learner Journal

PowerPoint Presentation, Problem Cards

|  | (squares cut out, 1 per learner), Problem <br> Picker Printable (4 copies), Learner Journal |
| :--- | :--- |
| 3. Setting Goals: Knowing Our Why | Read Aloud: What Do You Do with A <br> Problem? (By: Kobi Yamada), Blank Calendar <br> Printable, Learner Journal |
| Time Considerations: 3-5 classes |  |

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

Around the Room: 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: | Possible Strengths: | Possible Skills: |
| :---: | :---: | :---: |
| - Littering | - Making people laugh | - Music - sing, play an |
| - Manners | - Listening for details | instrument, dance |
| - Following | - Public | - Sports (stick handling, |
| Instructions/Rules | Speaking/Performing | catching a ball, etc.) |
| - Poverty | - Multi-tasker | - Art-draw, paint, |
| - Clean Drinking Water | - Positive Attitude | sketch, visual media |
| - Endangered Animals | - Flexible | - Math - numbers (add, |
| - Recycling | - Problem-Solver | subtract, multiple or |


| $\bigcirc$ | Homelessness | $\bigcirc$ | Think Outside the Box |  | divide) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\bigcirc$ | Positive Mental Health |  | A Natural Leader | $\bigcirc$ | Writing or Storytelling |
| $\bigcirc$ | Anti-Bullying |  | Help Others Without | $\bigcirc$ | Fix broken things |
| $\bigcirc$ | Peace |  | Being Asked | $\bigcirc$ | Speak what I am |
| $\bigcirc$ | Love and Respect for | $\bigcirc$ | Patient |  | thinking clearly to |
|  | All People |  | Self-Control/Self- |  | others |
| $\bigcirc$ | Climate Change |  | Discipline | $\bigcirc$ | Video Gaming |
|  |  |  |  | $\bigcirc$ | Baking/Cooking |

Who Am I? Reflection Exercise: Have learners open their journals and with a pencil, complete the Who Am I? page after you have read and looked it over as a whole group. 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:
For K-2: Divide learners into 3 groups. Provide each group a pictograph printable (below) and have learners work together to create a pictograph representing the number of passions, strengths, and skills within their classroom. Review that each passion, strength, or skill is listed on the left column and a symbol (emoji, heart, star, etc.) is drawn for every learner having that passion, strength, or skill on the right column. Suggest the following tasks: counters, pictograph symbol artist, pictograph labeler, checker (of work and numbers), scratcher (scratching off already used info from the charts). For an example, look at Slide \#3.

For 3-5: 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 $1 \mathrm{~s}, 2 \mathrm{~s}$, or 5 s . For an example, look at Slide \#4.

Display the pictographs or bar graphs within the classroom for learners to use throughout the K-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 |  | Small |  | None at All |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\bigcirc$ | Impacts many people | $\bigcirc$ | Impacts me and/or a | $\bigcirc$ | No obstacle |
| $\bigcirc$ | Effects many things (environment, people, |  | small number of people | $\bigcirc$ | Nothing to solve |
|  | animals, future) | $\bigcirc$ | Has a solution (and |  |  |
| $\bigcirc$ | Not one easy solution |  | perhaps many |  |  |
| $\bigcirc$ | Feels hopeless to try |  | different solutions) |  |  |
|  | to solve it | $\bigcirc$ | Quickly fixed |  |  |
| $\bigcirc$ | Trying \& Not Trying to solve it - can lead to more problems (complicated) | $\bigcirc$ | May not be a problem again |  |  |

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 and have learners sketch or write about the BIG, small, and none-at-all problems they know about, on the Problems page in their journal.

Around the Room Problem-Picking: 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, 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 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?

For K-2: Choose 2 problems. Fill out the Problem Picker Printable (below), as a class, for each problem. Have a group discussion on which one matches most of our passion, skills, and strengths. Have learners vote on the problem that they wish to try to solve together!

For 3-5: 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. Allow time for learners to journal their chosen problem on the corresponding page in the Learner Journals.

## 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 K-2 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 shadow. Our identified problem is now an opportunity 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 $\qquad$ ? 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.

Calendar Goals: Using the printable calendar (included below), or one that is already in your classroom, look ahead to the next 2-3 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 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 in the one provided in their Learner Journal to help organize, prepare, and stay on track. Other dates will be added in future units.

## Acknowledgements:

1. Definition of Problem. Kiddle Encyclopedia:
https://kids.kiddle.co/Problem\#:~:text=A\ problem\ is\ a\ situation,is\ called\ a \%20\%22solution\%22, 2023.
2. Pictograph. Third Space Learning: https://thirdspacelearning.com/gcsemaths/statistics/pictograph/, London, 2023.
3. Bar Graph. Splash Learn: https://www.splashlearn.com/math-vocabulary/geometry/bargraph, 2022.

## This Is Me!

Name: $\qquad$

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 Pictograph of

|  | Choose a symbol to draw for every learner. |
| :---: | :---: |
|  | Number of Learners: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Key: 1 $\qquad$ = 1 Learner

Our Bar Graph of


## 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.



## Problem Picker

Centre of Excellence
ENTREPRENEURSHIP
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!

## Calendar Goals

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


