1A - Class Results

Diagnostic assessment summary for the class

⚡ The summary is automatically calculated from each student's last diagnostic assessment.

ESSENTIAL: What to prioritize

🚩 The student has probably not understood the **vocabulary** needed to **navigate sequences of pictures**. This vocabulary is essential for the student to **grasp the concept of number line in the future**.

71% =

🚩 The student is probably not ready to understand **numerical operations or word problems** in **1-5** range.

The student was unable to navigate the number range 1-5 using ordinals, count the missing objects up to 5 and compare the number of objects using the concepts of n more than / n fewer than. Practice intuitive insight into the structure of quantity, i.e., decompose the number of objects to 5 into two groups. You can start safely from groups of 3 or even just 2 objects. Compare the quantity using the concepts of 1 more than / 1 fewer than. Practise number range and vocabulary necessary for its navigation.

43% =
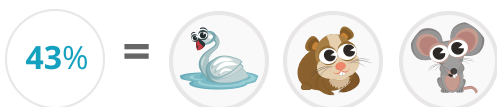
🚩 The student is not yet ready to **understand the numbers 1-5** and their meanings.

The student have not mastered one-to-one correspondence in the range 1-5. Manipulate objects, count them and reinforce connections between a quantity and its corresponding numeral representation and number name.

29% =
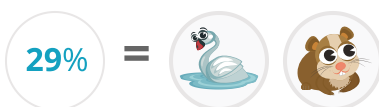
DESIRABLE: What to consider teaching

🔔 The student was unable to **create and compare groups of objects** using the concepts of **n more than / n fewer than** in the **1-5** number range. This concept is key to future understanding of relationships between numbers, numerical operations and word problems.

Check for understanding of the concept of more/equal/less and create situations of 1 more than and conversely 1 fewer than. Ask the student to narrate the entire process aloud.

86% =
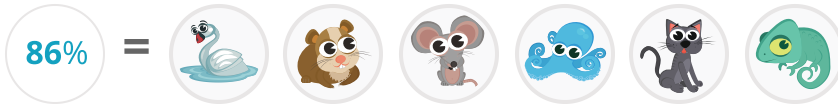
🔔 The student was **not able to navigate the number range 1-10 with visual scaffolding**. They probably do not understand that **ordinals** determine the position of an element in the series and that **the last number** in the series determines the **total**.

This is important for understanding number values. Practice the number range 1-10 and the vocabulary necessary for navigating it.

86% =

🔔 The student was not able to apply **analytical thinking** in order to **identify the pattern within the picture sequence**. This may limit their development of mathematical concepts and problem solving.

Pupils develop this skill gradually. Therefore, they are not expected to master these tasks at the beginning of schooling. It is recommended to strengthen their cognitive skills (by practising grouping according to given conditions, identifying conditions for grouped objects) and logical thinking (by practising deductive and inductive reasoning in problem solving).

57% =

🔔 The student was unable to **navigate on a 3x3 grid**. These skills are necessary for geometry, spatial perception, number line and numerical operations, as well as for working with graphs and diagrams.

This refers to concepts such as top right, middle left, etc. Start by practising spatial orientation in a real physical environment. Proceed to practising orientation using body parts, using a picture, on a 2x2, 3x3 grid.
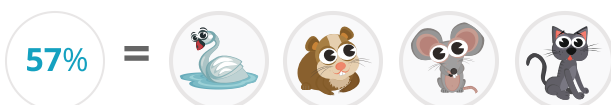
57% =

🔔 The student is probably not ready to understand **numerical operations** in the **1-10** range.

The student was unable to navigate the number range 1-10 without visual scaffolding. They could not compare the number of objects using the concepts of n more than / n fewer than. Practise the number range 1-10 and vocabulary necessary for its navigation with visual scaffolding and later without it. Go back to comparing number of objects in the range 1-5 using the concepts of n more than / n fewer than, revisit the number range 1-10 and only then move to comparing number of objects in the 1-10 range.

57% =

🔔 The student is probably not yet ready to **understand the numbers 1-10** and their meanings.

The student have not mastered one-to-one correspondence in the range 1-10. Manipulate objects, count them and reinforce connections between a quantity and its corresponding numeral representation and number name.

43% =
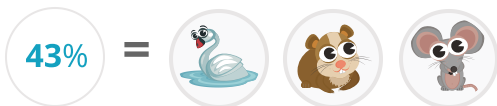
🔔 The student has mastered basic **grouping**, but has not yet mastered the **combination of positive and negative conditions** that indicate the current level of logical and verbal thinking important for mathematics.

Check for understanding of each instruction and repeat if necessary. Gradually increase the difficulty by adding negative conditions (e.g., "does not have a hat"). Start with one or two pieces of information and add more later.

29% =

🔔 The student was able to **count the number of missing objects up to 5**. They were also able to compare the number of objects using the concepts of **n more than / n fewer than** in the **1-5 range**. However, they did not demonstrate ability to **navigate the number range 1-5 with visual scaffolding**.

Practice orientation on the number line using the concepts of before, after, between, etc.

29% =

🔔 The student managed to **compare the number of objects** using the concepts of **n more than / n fewer than** in the range **1-10**, but they were not able to **navigate the number range 1-10 without visual scaffolding**.

This indicates lack of fluency in the 1-10 number range. Practice the number line 1-10 and the vocabulary neccessary for its navigation. Use visual scaffolding and gradually fade it out.

29% =

🔔 The student was able to navigate the **number range 1-10 without visual scaffolding**, but they were not able to **compare** number of objects using the concepts **n more than / n fewer than**. This concept is crucial for **future word problem solving**.

There is a risk of formalism in skill acquisition. Go back to comparing the number of objects using the concepts of n more then / n fewer than in the 1-5 range. Then briefly review the number range 1-10 and move on to comparison in the 1-10 range.

14% =

🔔 The student was able to **compare the number of objects** using the concepts of **n more than / n fewer than** in the **1-5** range. However, they were not able to navigate the **number range 1-5 with visual scaffolding** and could not **count the number of missing objects up to 5**.

Practice orientation on the number line using the concepts of before, after, between, etc. Manipulate object to practice intuitive insight into the structure of quantity, i.e., decompose the number of objects up to 5 into two groups. You can start with groups of 3 or even just 2 objects.

14% =

MASTERED: What students can already do

✅ The student is ready to **understand the numbers 1-5** and their meanings.

The student understands one-to-one correspondence (linking quantity to numeral and number name) in the range 1-5.

71% =

✅ The student has mastered all the tasks regarding **grouping**, which is the foundation of **mathematical thinking**.

57% =

✅ The student is ready to **understand the numbers 1-10** and their meanings.

The student understands one-to-one correspondence (linking quantity to numeral and number name) in the range 1-10.

57% =

✅ The student was able to apply **analytical thinking** on order to **identify the pattern within the picture sequence**. These skills help them develop mathematical concepts and problem solving.

Great! Some students reach this skill only later in their schooling.

43% =

✅ The student has mastered **navigation on a 3x3 grid**. These skills are necessary for geometry, spatial perception, number line, numerical operations as well as for working with graphs and diagrams.

This refers to concepts such as top right, middle left, etc.

43% =

✅ The student has mastered all the **essential skills** to begin learning in the first grade.

29% =

✅ The student understands the **vocabulary** needed for **navigating sequences of pictures**. This vocabulary is essential for the student to **grasp the concept of number line in the future**.
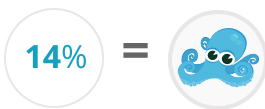
29% =

✅ The student is ready to understand **numerical operations** in **1-5** range.

The student understands that numbers express quantity, ordinals express the position of an element in a series and that the last number in a series represents the total (cardinality). They can count the number of objects up to 5. In this number range, the student can compare the number of objects using the concepts of n more than / n fewer than.

14% =

✅ The student was able to **navigate the number range 1-10 with visual scaffolding**. They understand that **ordinals** determine the position of an element in the series and that the **last number** in the series determines the **total** .

14% =

✅ The student is **ready to understand numerical operations** in the **1-10** range.

The student understands that quantity can be expressed numerically and verbally. They understand that ordinals determine the position of an element in a series and that the last number in a series determines the total. In addition, they already developed a good mental picture of the number range 1-10 and can navigate it even without visual scaffolding.

14% =
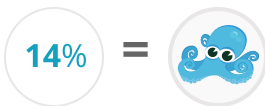
✅ The student is able to **create and compare groups of objects** using the concepts of **n more than /n fewer than** in the **1-5** number range, including situations where **inverse relationship** between n more than and n fewer then must be applied. This concept is key to future understanding of relationships between numbers, numerical operations, and word problems.

Even though the student hears "n more than" in the instruction, they understand that objects must be removed in order to complete the task.

14% =
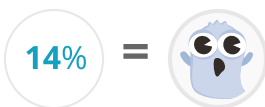
OTHER: What to double check

🫢 It is unlikely that a student would fail to master **basic grouping**, yet master **a combination of positive and negative conditions**.

It is more likely that there was a technical problem while working in the app. Ask the student to complete exercise 102 again.

14% =

LIST OF STUDENTS:

- Alejandro
- Anna
- Emma
- Leilani
- Ludo
- Mason
- Tobias