Topic Activation/Customization/Deactivation (Section 3.1.1)

The teacher plays an important role in making Mindspark content available to the students of her class (section). **Remember, students can only access topics that are activated and made available by the teacher. It is very vital for the topics that are activated in Mindspark to be synchronized with the content planned for Classroom instruction. Mindspark has to be integrated into the Lesson plans made by the teachers.**

Mindspark recommends a maximum of 3-4 topics be kept activated at any given point of time - this helps students to focus on the topic being taught by the teacher in the class while at the same time it gives the opportunity for students who are lagging behind in a particular topic to achieve topic progress although a good majority of the class has moved to newer topics. Keeping more than 4 topics active prevents students from getting adequate practice, thereby hampering his/her topic progress. Thoughtful topic activation also ensures that the students maintain the link with topics covered in the recent past.

Good Practice Tip:
Not more than 3-4 topics should be ACTIVE at a time. Generally, a topic should not be active for more than 30 days.

Based on the Curriculum/Board followed by the school, the Mindspark curriculum is default set to any of the following-

- Mindspark Recommended Curriculum
- CBSE Curriculum
- ICSE Curriculum
- IGCSE

However, the school has the option of changing the Mindspark curriculum using the Mindspark administration user ID. Before the process for Activation is described, it is important to understand the organization of the topics in Mindspark. Teachers can view "All" Topics available in Mindspark or select the master topic to view topics included therein. Master topics available in Mindspark are -

1. Algebra
2. Fractions and Decimals
3. Geometry
4. Measurement
5. Mensuration
6. Factors and Multiples
7. Numbers
8. Percentages and commercial Math
9. Problem Solving
10. Real Numbers
11. Statistics and Data Analysis
12. Trigonometry

Each of the master topics is composed of topics which are mapped to a particular class or group of classes.

For example, the table below shows the topics covered in the master topic Measurement –

1. Measurement	Class range
1.1 Length	1,2,3,4,5
1.2 Money	1,2,3,4,5
1.3 Time	1,2,3,4,5
1.4 Mass and capacity	2,3,4,5
1.5 Problems on measurement and estimation	3,4,5

Table 3.1.1.1: Break-up of the Master Topic "Measurement"

Each topic is composed of learning units. The mapping of the learning units to a topic is dependent on the curriculum for a particular class, implying that a learning unit may be mapped to class 1 in ICSE while being mapped to class 2 in CBSE and Mindspark recommended curriculum flow. It is very important for a teacher to view the learning units of a topic before activating the topic. **To view the learning units contained in the topic select "See/Customize/Activate".** Although Mindspark supports ICSE/IGCSE/CBSE curriculum and as well as its own curriculum (Mindspark recommended), it is able to incorporate curriculum changes to suit the lesson plans of the teacher. By **customizing**, the teacher develops a new topic consisting of learning units that cater to the specific class curriculum of the teacher.

Looking at the composition of the topic helps the teacher to decide if the topic needs to be customized to suit the class curriculum. A topic when customized first, will have a choice of activating NOW or LATER - [for a clearer and deeper understanding refer to the note on Customisation in Appendix 1 (at the end of this section)]

Good Practice Tip:
A customised topic should ideally have 4-5 learning units as this would give students sufficient practice and enable them to achieve faster topic progress. Although the composition of the customised topic is at the discretion of the teacher, it is recommended that the teachers do not resort to excessive customization as this defeats the basic feature of the adaptive logic.

The table below shows the composition of the topic "Length" -

Length	Mindspark Recommended class	CBSE Recommended Class	ICSE Recommended Class
1. Informal understanding of length	1	1	1
2. Problems based on concept of length	1,2	1,2	1,2
3. Measurement using informal units of length	3	3	2,3
4. Measurement of length using the cm-mm scale	3	3	2,3
5. Measurement of length -interactive	3,4	4	3
6. Using standard units of length (m and cm)	4,5	4,5	3,4
7. Conversion of units of length	4,5	4,5	3,4
8. Using standard units of length (km and m)	4,5	4,5	3,4
9. Practice-Conversion among units for length	4,5	4,5	3,4
10. Concept and computation of perimeter	4,5	4,5	3,4

Table 3.1.1.2: Learning Units in the topic Length

To activate a topic -

- Select "My Topics" OR
- Use the short cut "Activate Topic" on the left hand-side panel of the teacher interface page

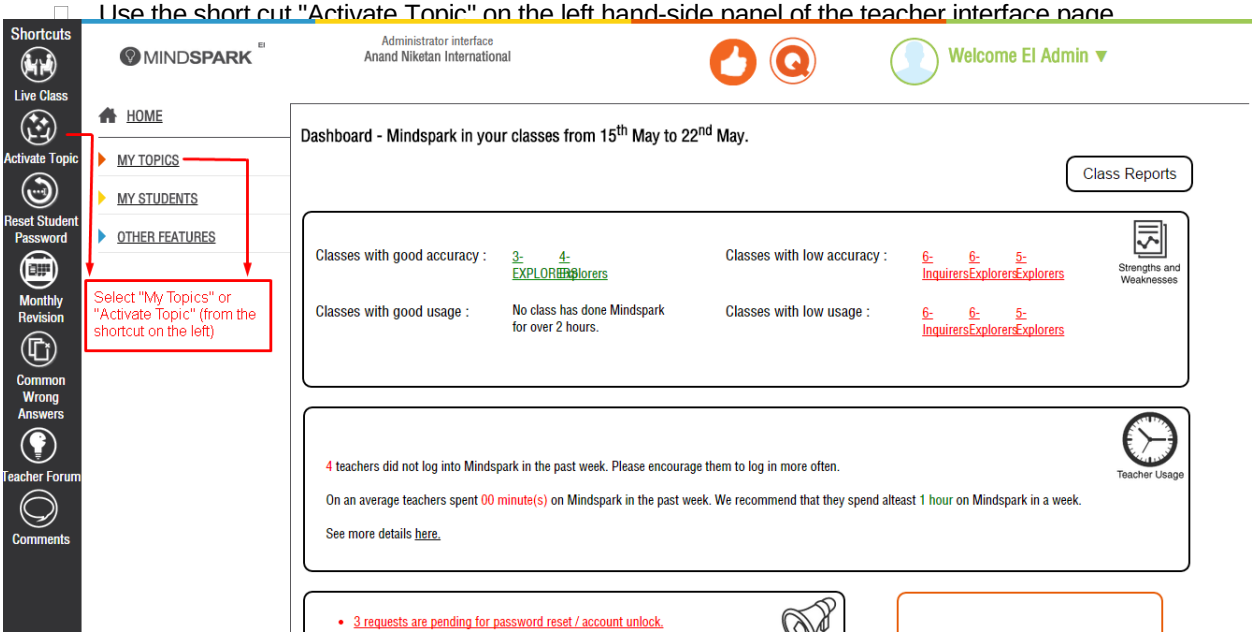


Figure 3.1.1.3: Topic Activation

For every class and section chosen, Mindspark makes available the following data on the topics:

- Currently Active Topics (Figure 3.1.1.4) stating the duration of activation and the average topic progress of the class
- All Active Topics
- Activate a Topic (List of Topics for Activation) - This section not only enables a teacher to activate a topic but also offers the teacher insights on the topic through Topic Research (Figure 3.1.1.5 and 3.1.1.6)

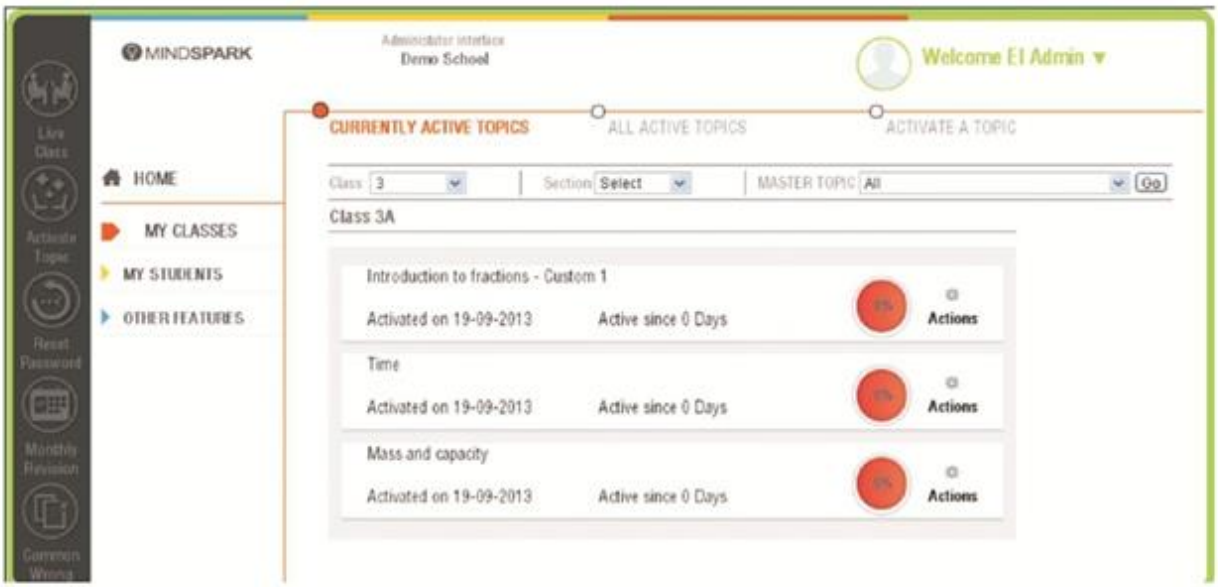


Figure 3.1.1.4: Currently Active Topics

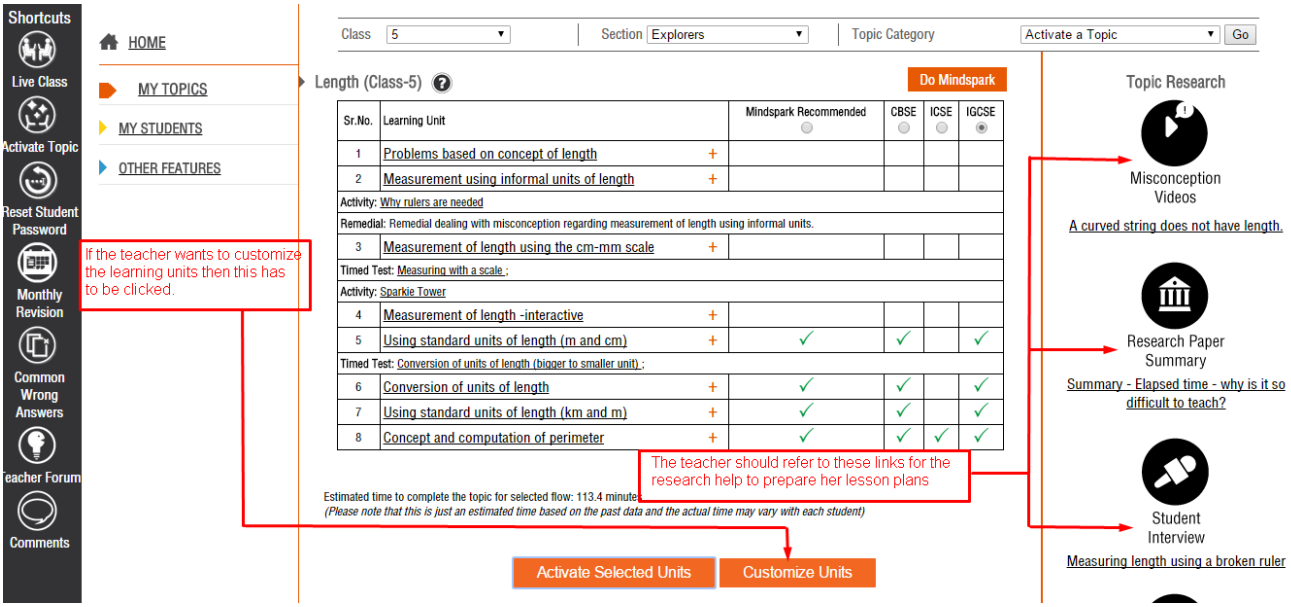


Figure 3.1.1.5: Activate a Topic Part 1

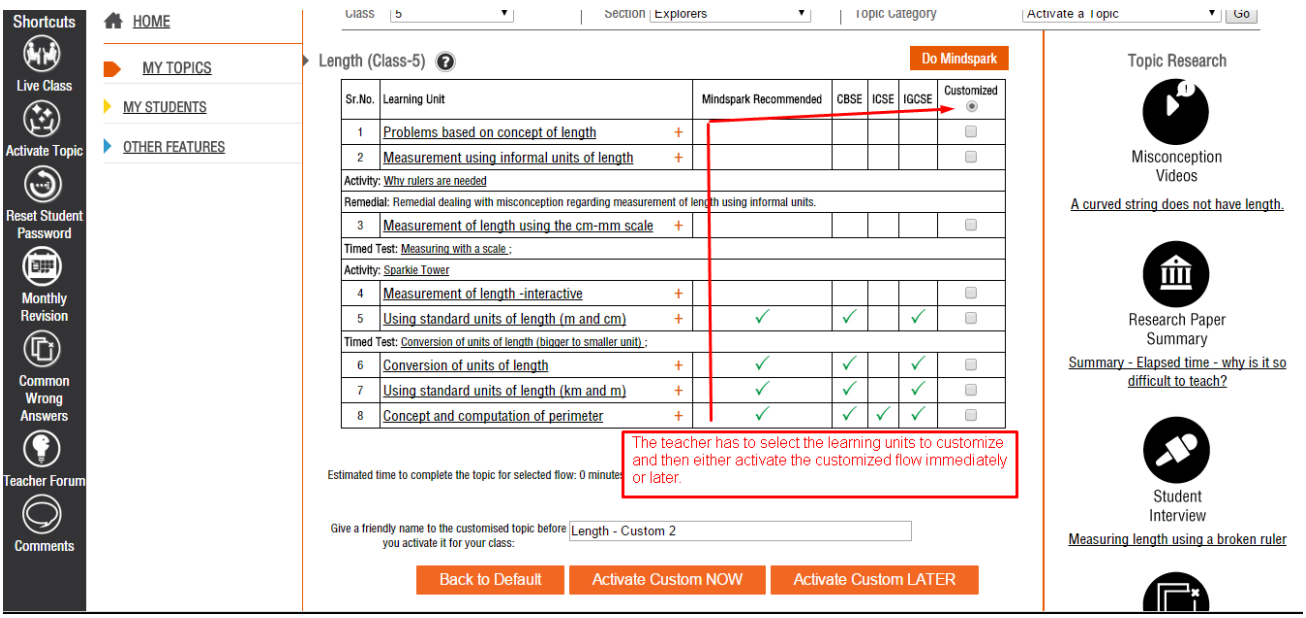


Figure 3.1.1.6: Activate a Topic Part 2

Mindspark assists a teacher in lesson planning as it provides vast and rich research data assimilated by Mindspark in the form of -

- Sample questions on the topic as could be expected in a Mindspark session.
- A repository of Research Studies and Student Interviews on the topic.
- Common Wrong Answers from the use of Mindspark by the students from Indian and International schools.
- An opportunity for the teacher to "DO Mindspark as a Student".
- A collection of short videos covering major misconceptions in a topic.

Deactivation of a Teacher Topic (Figure 3.1.1.7)-

- Select "Currently Active Topics" in "My Class"
- The page displays the list of topics active for the class & sections
- Move the cursor over "Actions" and select "Deactivate" for deactivation

Figure 3.1.1.7: Topic Deactivati

Good Practice Tip:
All Maths teachers of a grade should jointly look at the topic composition and decide on the efficacy of the topic in its originality or decide to use a customized version of the topic. Although, each teacher is free to customize a topic individually, since the curriculum remains the same across the different sections of a grade, it is advisable to have a uniform customized topic though the dates of activation may differ across sections of a grade.

Topic Activation/Customization/Deactivation -

- Teacher must study the learning units contained in a topic
- All the Maths teachers of a particular grade/class must be in consensus on the customized version of the topic and topics must be customized uniformly across all sections of the grade (the dates of activation/deactivation may differ from section to section)
- Teachers may find it beneficial to read the Topic Research section while planning a lesson on a Topic
- Ideally, a topic should remain active till 75%-85% topic progress is achieved

3.2 CUSTOMISATION

Mindspark offers teachers and schools an enormous amount of flexibility in planning the weekly lessons. It is true that concepts/topics taught across primary and middle school remain uniform across Boards/Curriculums; however, it is also true that there are shades of variation in the curriculum across Boards, schools. The good news is that Mindspark supports this variation and acts as an effective tool to the teacher while developing and executing her lesson plans. This feature of Mindspark called Customisation allows the teacher to map specific learning units of the Topic which she wants her students to access and work upon while teaching.

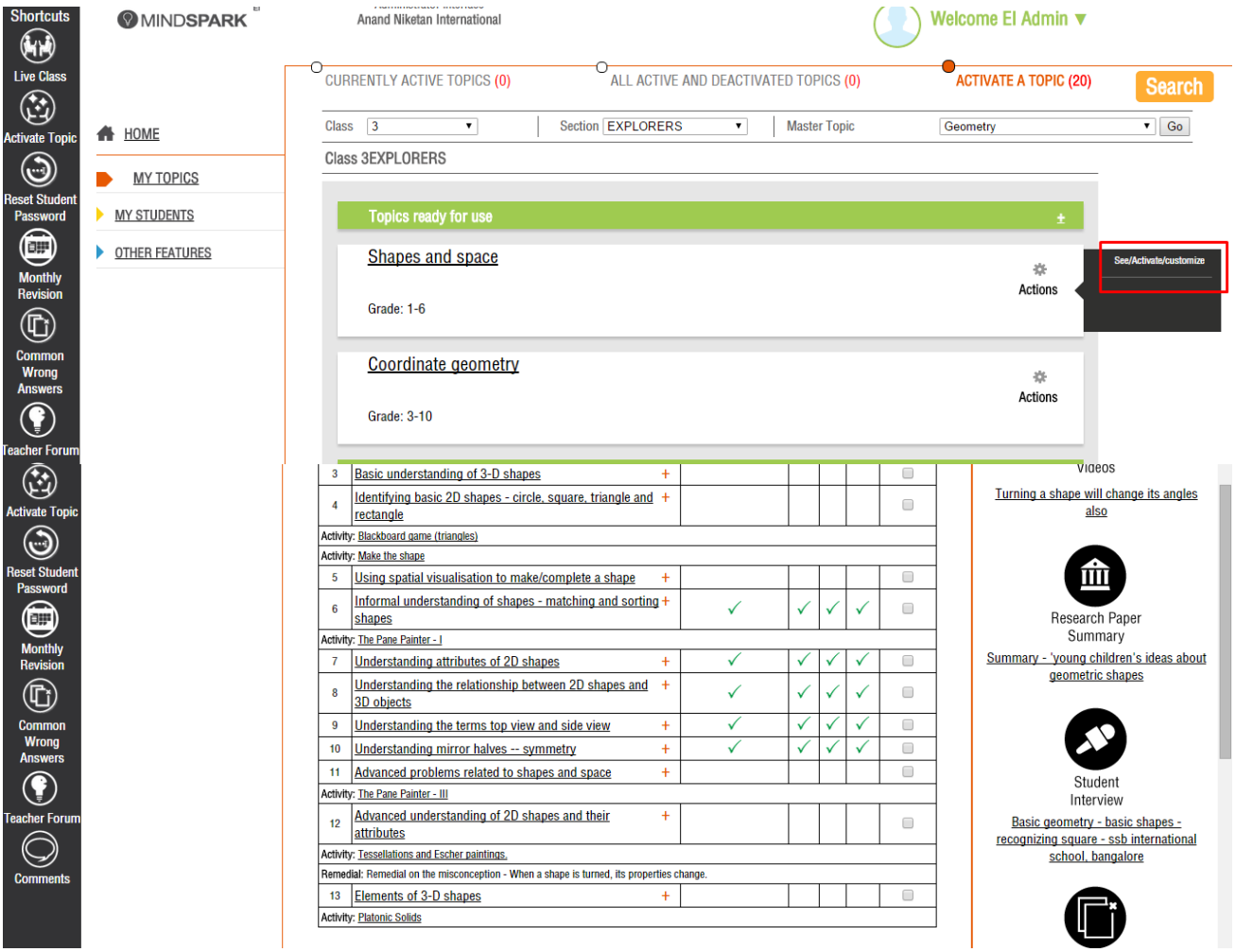
What is customisation?

- **Tool for teachers to stream line and synchronize the Mindspark Topics to the curriculum planned for his/her grade. With Customisation teachers can remove specific learning unit/learning units that he/she is not covering for the grade but is otherwise done in Mindspark.**
- **Teacher may use Customisation as an effective tool to revise parts of a topic which were covered in the previous grade year. This is possible as the teacher is not only able to view the entire topic (including the learning units) but is also empowered to create a topic to facilitate revision in the topic. This may be done by creating a New Topic (or customized topic) which would include learning units (related to the Topic) covered in the previous grade. This proves to be a very powerful tool for the teachers as it provides a pertinent picture of the readiness of the students to move ahead in the topic in the current year.**

Illustration of Customisation

Teacher X teaching Math in class 3 of an ICSE school plans to teach the **Topic - Shapes & Spaces.** Let's look at what Mindspark covers in the Topic for class 3.

Step I - Select "See/Customise/Activate" from the list of Topics available for activation (Figure 3.2.1)



In the topic Shapes and Space in Mindspark, at a Class 3 level,

- students would start with learning unit 6 -Informal understanding of shapes - matching and sorting shapes, then move through the following higher learning units -
  learning unit 7 -Understanding attributes of 2D shapes
  learning unit 8 - Understanding the relationship between 2D shapes and 3D objects
  learning unit 9 - Understanding the terms top view and side view
  learning unit 10 - Understanding mirror halves

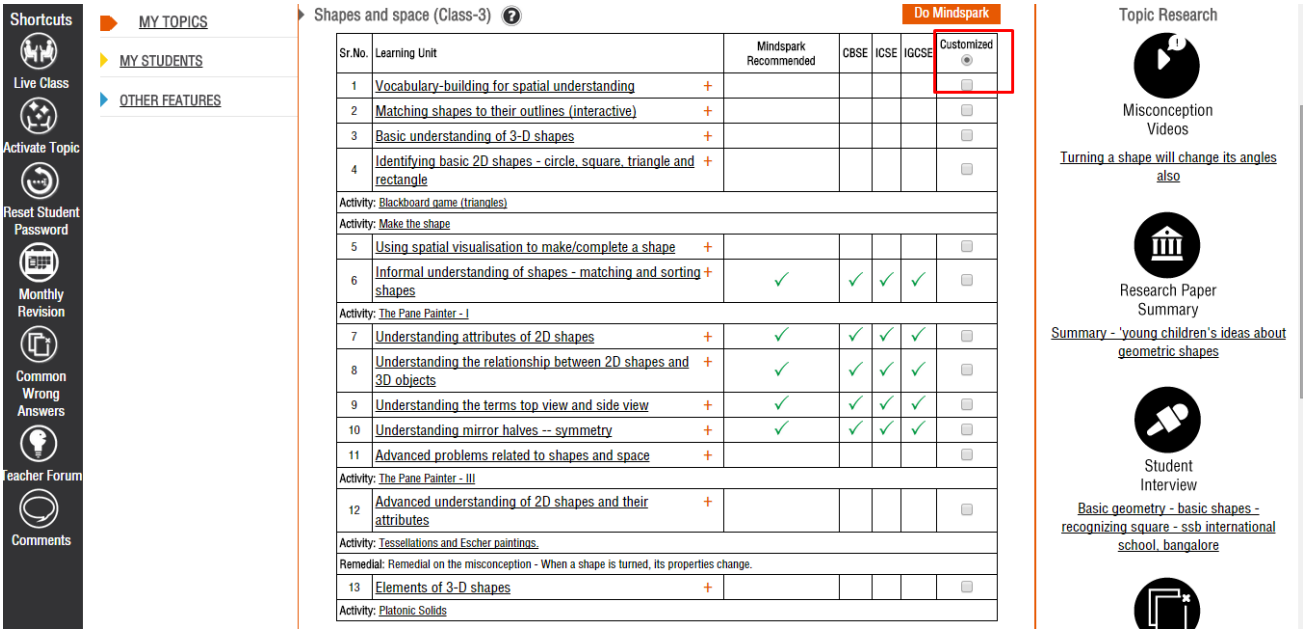
But, the Teacher's lesson plan for Week 1 is -

Week 1	Curriculum Plan	Time	Mindspark Teacher Topic
Monday	Mindspark Session - Revision	30 minutes	Learning unit 4 - Identifying basic 2D shapes -circle, square, triangle and rectangle Learning unit 5 - Using Spatial visualization to make/complete a shape
Tuesday	Classroom Instruction	30 minutes	
Wednesday	Classroom Instruction	30 minutes	
Thursday	Mindspark Session	30 minutes	Learning unit 6 -Informal understanding of shapes - matching and sorting shapes Learning unit 7 -Understanding attributes of 2D shapes
Friday	Classroom Instruction	30 minutes	

> **Note:** *In this example, the school is not covering all the learning units that are normally covered in ICSE at a class 3 level. This is a situation where the teacher needs to customize Mindspark with her curriculum plan.*

The process for customising learning units 4 and 5 (for Class period 1) would involve the following steps -

Step 1 - **Activate the radio button under "Customised"** (Figure 3.2.3)



Sr.No.	Learning Unit	Mindspark Recommended	CBSE	ICSE	IGCSE	Customized
1	Vocabulary-building for spatial understanding +					
2	Matching shapes to their outlines (interactive) +					
3	Basic understanding of 3-D shapes +					
4	Identifying basic 2D shapes - circle, square, triangle and rectangle +					
Activity: Blackboard game (triangles)						
Activity: Make the shape						
5	Using spatial visualisation to make/complete a shape +					
6	Informal understanding of shapes - matching and sorting shapes +	✓	✓	✓	✓	
Activity: The Pane Painter - I						
7	Understanding attributes of 2D shapes +	✓	✓	✓	✓	
8	Understanding the relationship between 2D shapes and 3D objects +	✓	✓	✓	✓	
9	Understanding the terms top view and side view +	✓	✓	✓	✓	
10	Understanding mirror halves -- symmetry +	✓	✓	✓	✓	
11	Advanced problems related to shapes and space +					
Activity: The Pane Painter - III						
12	Advanced understanding of 2D shapes and their attributes +					
Activity: Tessellations and Escher paintings.						
Remedial: Remedial on the misconception - When a shape is turned, its properties change.						
13	Elements of 3-D shapes +					
Activity: Platonic Solids						

Figure 3.2.3: Choosing "Customised" curriculum

By choosing "Customised", the teacher is initiating a flow, different from the normal ICSE flow.

Step 2 - Teacher selects learning units 4 & 5 for the first Mindspark Session on Shapes and space, (even before the start of the class 3 content) (Figure 3.2.4)

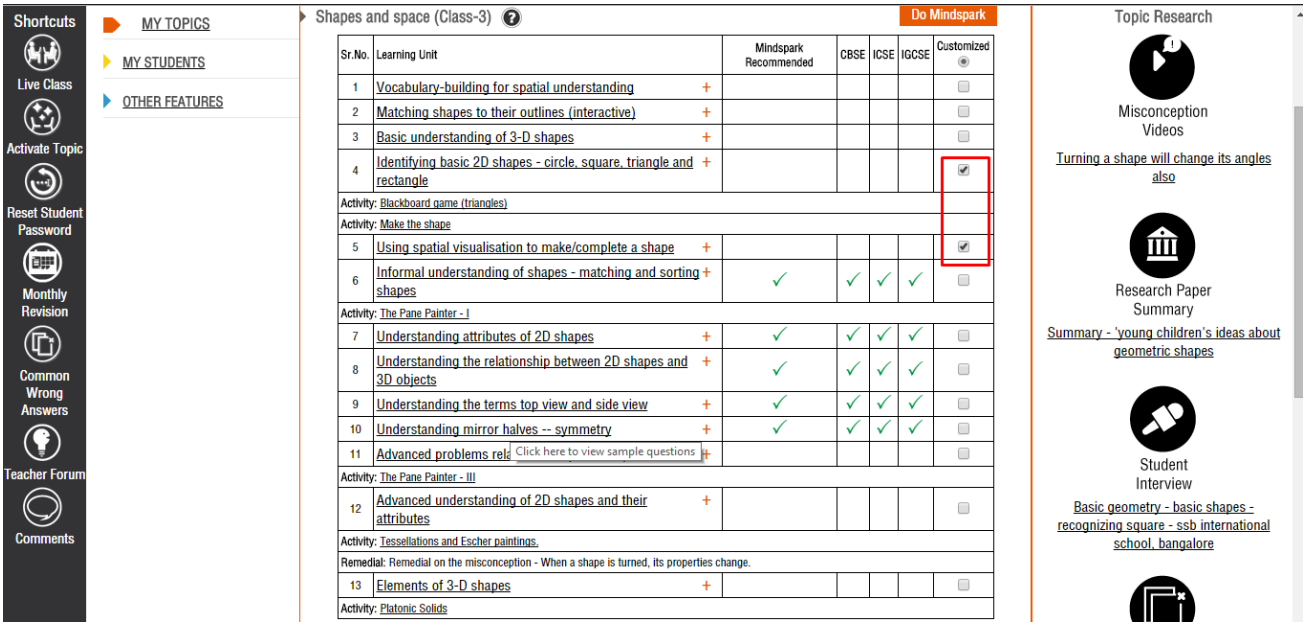
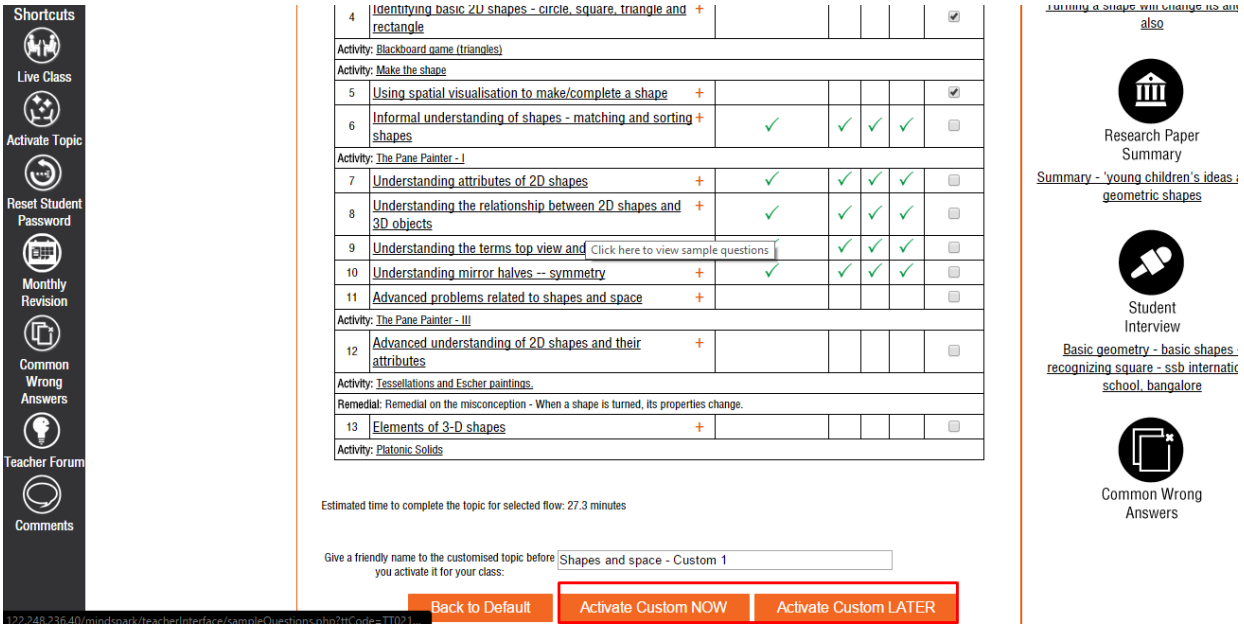


Figure 3.2.4: Selecting learning units for customised curriculum

Step 3 - For Mindspark to save and activate this change in the curriculum, the teacher needs to click/tap on "Activate Custom NOW" or "Activate Custom LATER" (at the end of the page) (Figure 3.2.5)

Figure 3.2.5: Save the customised version of the teacher topic



Step 4 - Click/Tap on the pop-up window requesting permission for customising. Remember, every attempt at customising results in a new topic (Figure 3.2.6)

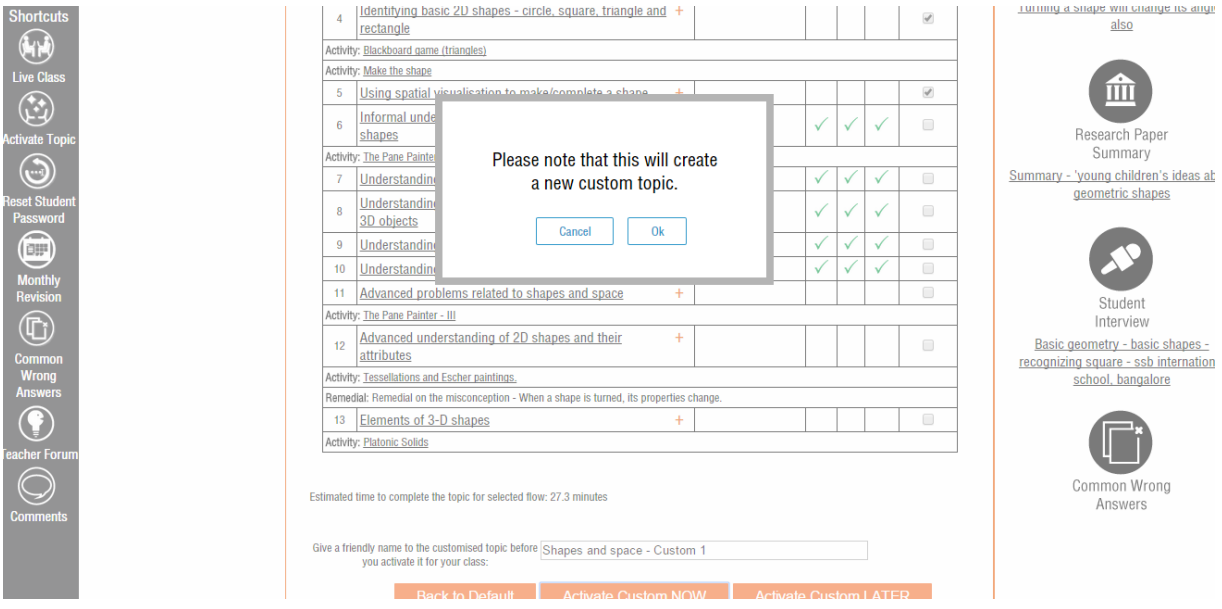


Figure 3.2.6

n this case, customising the topic "Shapes and space" to include only learning units 4 & 5 has resulted in a new topic - "Shapes and space - Custom 1" (Figure 3.2.7)

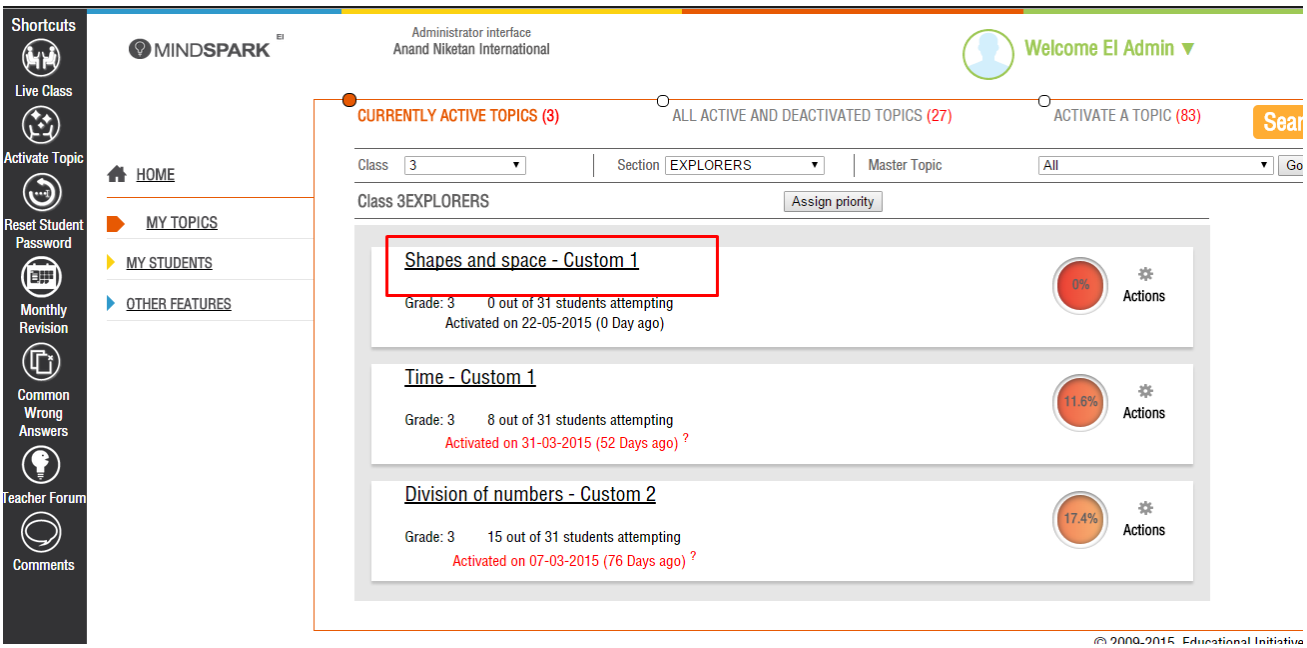


Figure 3.2.7: Customised teacher topic in the list of topic available for activation

Step 6 - Customising further as the curriculum gathers pace.

Any of the following two processes could be used.

Process I - Step 6A - Click/tap on "See/Customize" against Shapes and space - Custom 1 (Figure 3.2.9)

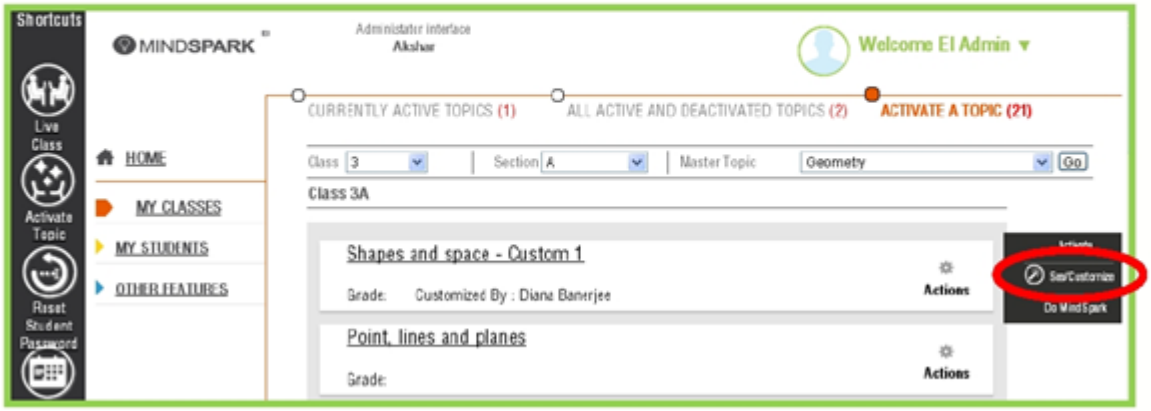


Figure 3.2.9: Recustomising

The page opens to show the composition of the topic "Shapes and Space", with the re-customize button (Figure 3.2.10)

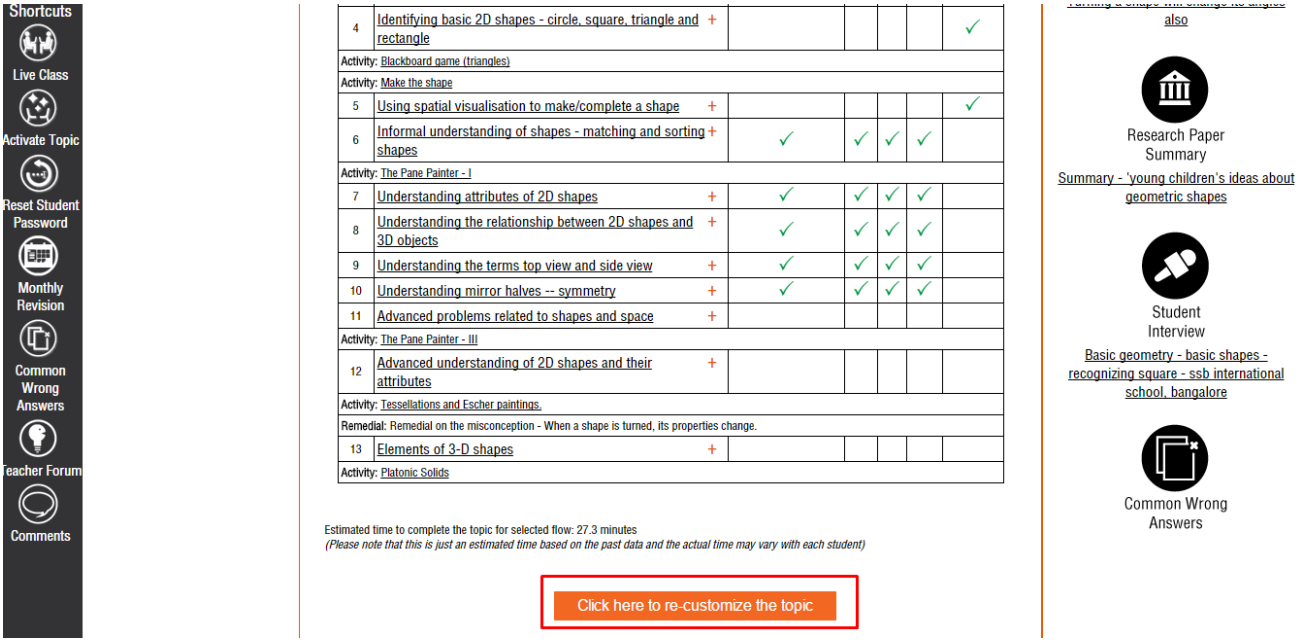


Figure 3.2.10: Composition of topic at class level

Follow Steps 1 to 4 to customize again (actually recustomise). The "re-customised" topic appears as "Shapes and space - Custom 2"

Observe that the Topic Activation page now shows the original Mindspark Topic (Shapes and space", the Topic after first customisation - "Shapes and space - Custom 1" and the Topic after second customisation - "Shapes and space - Custom 2"

So, every customisation leads to a creation of a new Topic which needs activation/deactivation.

Process II

Step 6B - Click/Tap "See/Customise" against Shapes and Space

Follow Steps 1 to 4 to customize again (actually re-customize!). The "re-customised" topic appears as "Shapes and space - Custom 2"

Note: Different customised versions of the same topic, which are active, cannot have a common learning unit or learning units included therein. In our example, learning units 4 and 5 can't be included (either or both) in another customised version of Shapes and Space and be kept active simultaneously. The reason for this being, repeated inclusion of learning units while customizing a topic leads to repetition of questions in Mindspark

Dos and Don'ts for effective customisation

Dos	Why?
Teacher to look at the sample questions in the Topic	Gives an idea about the type of questions and their difficulty levels
Teacher to study the Learning Units within a Topic	To understand 1. Coverage of the topic at the class level 2. Movement of this coverage - Mindspark moves in an ascending order. In our illustration, Mindspark would start with learning Units 6 and move towards Learning Unit 10, if the Topic is not customised
Teacher to benefit from "Do Mindspark as a student"	Gets a feel of a student session and also gets to understand how Mindspark adapts itself to the student's level. It is advised that a teacher should try to emulate the student's approach while attempting the questions in "Do Mindspark as a student"

Don'ts	Why?
Activate the original Topic and then customize	Would expose to the students to learning units which may not be pertinent to the curriculum

Note - Topic progress of a student in a customized topic would be a measure of the completion status of the child in the customised topic, would be calculated in the same manner as is calculated in a non-customised (or original) topic. Therefore, a student doing Mindspark in a customized topic may be taken to a higher/lower learning unit (beyond the scope of the customized topic). This would be indicated with a green (when the student is taken to a higher learning unit) or a red star (when the student has been taken to a lower learning unit). Ideally, if the teacher customizes with the objective of controlled practice in the learning units that he/she is currently teaching and is not in favour of students moving to higher learning units, the student must be instructed to choose the "NO" option when the pop-up window appears after successful completion of the customised topic.