

# Maths

## Data Handling

### Phase 1

K1

#### IB Phase 1

Learners will develop an understanding of how the collection and organization of information helps to make sense of the world. They will sort, describe and label objects by attributes and represent information in graphs including pictographs and tally marks. The learners will discuss chance in daily events.

#### Conceptual Understandings IB1

We collect information to make sense of the world around us. Organizing objects and events helps us to solve problems. Events in daily life involve chance.

## Learning outcomes

### Data Handling

Understand that information can be collected in different ways

Answer yes/no questions to interpret data

### Probability

Discuss familiar events involving chance using everyday language such as, will happen, won't happen, might happen

K2

#### IB Phase 1

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## Conceptual Understandings IB1

We collect information to make sense of the world around us. Organizing objects and events helps us to solve problems. Events in daily life involve chance.

## Data Handling

Collect, organize and represent data (including pictograms, tally marks)

Answer direct/closed questions to interpret data, for example how many people celebrate their birthday in January?

## Probability

Discuss familiar events involving chance using everyday language such as, will happen, won't happen, might happen

## Year 1

## IB Phase 1

Learners will develop an understanding of how the collection and organization of information helps to make sense of the world. They will sort, describe and label objects by attributes and represent information in graphs including pictographs and tally marks. The learners will discuss chance in daily events.

## Conceptual Understandings IB1

We collect information to make sense of the world around us. Organizing objects and events helps us to solve problems. Events in daily life involve chance.

## Data Handling

Collect, organize and represent data (including pictograms, tally marks and living graphs using real objects and people)

Interpret data where one object or drawing represents one value

Interpret data by comparing quantities for example, more, fewer, less than, greater than

## Probability

Identify familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen'



## Pattern and Function

### Phase 1

K1

#### IB Phase 1

Learners will understand that patterns and sequences occur in everyday situations. They will be able to identify, describe, extend and create patterns in various ways.

#### Conceptual Understandings IB1

Patterns and sequences occur in everyday situations.  
Patterns repeat and grow.

## Learning outcomes

### Pattern and Function

Sort familiar objects.

Recognise, describe and create simple patterns in everyday situations.

K2

#### IB Phase 1

Learners will understand that patterns and sequences occur in everyday situations. They will be able to identify, describe, extend and create patterns in various ways.

#### Conceptual Understandings IB1

Patterns and sequences occur in everyday situations. Patterns repeat and grow.

## Pattern and Function

Sort and classify familiar objects and explain the basis for these classification.

Create, describe and extend patterns in everyday situations using objects and drawings.

Year 1

### IB Phase 1

Learners will understand that patterns and sequences occur in everyday situations. They will be able to identify, describe, extend and create patterns in various ways.

### Conceptual Understandings IB1

Patterns and sequences occur in everyday situations.  
Patterns repeat and grow.

## Pattern and Function

Sort and classify familiar objects and explain the basis for these classification.

Copy, extend, create and describe patterns with objects and drawings

Recognise patterns in the number system

Investigate and describe number patterns formed by skip counting

## Shape and Space

### Phase 1

K1

#### IB Phase 1

Learners will understand that shapes have characteristics that can be described and compared. They will understand and use common language to describe paths, regions and boundaries of their immediate environment.

#### Conceptual Understandings IB1

Shapes can be described and organized according to their properties.  
Objects in our immediate environment have a position in space that can be described according to a point of reference.

## Learning outcomes

### 2D and 3D Shape

Sort, describe and name familiar two-dimensional shapes and objects in the environment.

### Location

Develop an understanding and begin to use simple vocabulary to describe position, for example, in, out, on under, up, down

K2

#### IB Phase 1

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#### Conceptual Understandings IB1

Shapes can be described and organized according to their properties.  
Objects in our immediate environment have a position in space that can be described according to a point of reference.

## 2D and 3D Shape

Sort, describe and name familiar two- and three-dimensional shapes and objects in the environment.

### Location

Develop an understanding and begin to use simple vocabulary to describe position, direction and movement, for example, inside, outside, above, below, next to.

Can follow and give simple directions describing paths, regions, positions and boundaries of their immediate environment.

## Year 1

### IB Phase 1

Learners will understand that shapes have characteristics that can be described and compared. They will understand and use common language to describe paths, regions and boundaries of their immediate environment.

### Conceptual Understandings IB1

Shapes can be described and organized according to their properties.  
Objects in our immediate environment have a position in space that can be described according to a point of reference.

## 2D and 3D Shape

Sort, describe, construct and name familiar two-dimensional shapes and objects in the environment

### Location

Describe position and direction in a practical context for example, inside, outside, above, below, next to, behind, in front of, up, down

## Measurement

### Phase 1

K1

#### IB Phase 1

Learners will develop an understanding of how measurement involves the comparison of objects and the ordering and sequencing of events. They will be able to identify, compare and describe attributes of real objects as well as describe and sequence familiar events in their daily routine.

#### Conceptual Understandings IB1

Measurement involves comparing objects and events.  
 Objects have attributes that can be measured using non-standard units.  
 Events can be ordered and sequenced.

## Learning outcomes

### Measurement of shape and space

Compare, describe and begin to measure the length, mass and capacity of objects using nonstandard units

### Measurement of time

Identify, describe and sequence events in their daily routine, for example, before, after, bedtime, storytime, today, tomorrow

K2

#### IB Phase 1

Learners will develop an understanding of how measurement involves the comparison of objects and the ordering and sequencing of events. They will be able to identify, compare and describe attributes of real objects as well as describe and sequence familiar events in their daily routine.

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## Conceptual Understandings IB1

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### Measurement of time

Identify, describe and sequence events in their daily routine, for example, before, after, bedtime, storytime, today, tomorrow

## Year 1

### IB Phase 1

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## Conceptual Understandings IB1

Measurement involves comparing objects and events.  
 Objects have attributes that can be measured using non-standard units.  
 Events can be ordered and sequenced.

### Measurement of shape and space

Estimate, compare, describe and measure the length, mass and capacity of objects using nonstandard units

### Measurement of time

Read and write the time to the hour

Name and order the days of the week

Compare and order the duration of events using the every day language of time

Connect days of the week to familiar events and actions



## Number

### Phase 1

K1

#### IB Phase 1

Learners will understand that numbers are used for many different purposes in the real world. They will develop an understanding of one-to-one correspondence and conservation of number, and be able to count and use number words and numerals to represent quantities.

#### Conceptual Understandings IB1

Numbers are a naming system.  
 Numbers can be used in many ways for different purposes in the real world.  
 Numbers are connected to each other through a variety of relationships.  
 Making connections between our experiences with number can help us to develop number sense.

## Learning outcomes

### Place Value

Count by naming numbers in sequences, initially to and from 10.  
 Apply one to one- correspondence when counting up to 10 objects.  
 Recognise, model, read, and order numbers to at least 10  
 Use the language of mathematics to compare quantities, for example, more, less.  
 Subitise ordered patterns in real life situations e.g. dots on a dice

### Four Operations

Understand simple addition and subtraction using concrete materials in situations

K2

#### IB Phase 1

Learners will understand that numbers are used for many different purposes in the real world. They will develop an understanding of one-to-one correspondence and conservation of number, and be able to count and use number words and numerals to represent quantities.

### Conceptual Understandings IB1

Numbers are a naming system.

Numbers can be used in many ways for different purposes in the real world.

Numbers are connected to each other through a variety of relationships.

Making connections between our experiences with number can help us to develop number sense.

### Place Value

Count by naming numbers in sequence to and from 20

Apply one to one- correspondence when counting up to 20 objects

Recognise, model, read, and order numbers to at least 20

Write numbers to 10

Use mathematical language for example more, less (cardinal) first, second (ordinal)

Subitise small collections of objects in real life situations

### Four Operations

Solve simple addition and subtraction problems up to ten using concrete material

Solve problems, including doubling, halving and sharing

## Year 1

### IB Phase 1

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### Conceptual Understandings IB1

Numbers are a naming system.

Numbers can be used in many ways for different purposes in the real world.

Numbers are connected to each other through a variety of relationships.

Making connections between our experiences with number can help us to develop number sense.

## Place Value

Count by naming numbers in sequences, to 100,

Apply place value to partition and rename two-digit numbers

Skip count in tens starting from zero

Recognise, model, read, and order numbers to

Use the language of mathematics to compare quantities, for example, more, less.

Estimate and subitise groups of up to ten objects

## Four Operations

Recall addition facts for single-digit numbers and related subtraction facts

Solve simple addition and subtraction problems using concrete material

Solve simple addition and subtraction problems using part/whole strategies

## Fractions

Share collections into equal parts

Divide objects into equal parts