CODE LANGUAGES (LEVEL 1)

Description
Learners will discover the purpose of language and begin to get more familiar with the evolution of language as well as codes. They will explore invisible ink, glyphs, numerical codes, braille and sign language to finally design their own code letter.

Leading Question
Can you write a letter in a hidden code language?

Total Time Required
5 hours over 5 days

Supplies Required
Paper, Pencil, Eraser, Dough

Learning Outcomes
1. Understanding of the history and evolution of language especially from oral to written language
2. Understanding the different types of language for those with visual or auditory impairments
3. Understanding numerical concepts and patterns through written language

Previous Learning
Knowledge of the alphabet

DAY 1

Today you will begin by exploring and understanding the history of languages.

Suggested Duration
Activity and Description
10 minutes
- Think of how many languages you can speak, read and write and:
  - Write or say out loud the same word in the different languages that you speak. For example: Water in English, Paani in Hindi and Maa’ in Arabic. What are the most common words used in your language? Think of the top 5 words you use and write or say them in the 2 – 3 languages you know?
- Write the same alphabets in multiple scripts, for example: what would the letter A, B, C be in the other language’s script?
- Do you know our language represents culture – how many words do you have for something common or something only found where you are from? For example: in many parts where there is a lot of rain and flooding there are multiple words for this.
- Do you know that language is evolving with us adding words on a regular basis e.g. the word jungle was added into the English vocabulary, as the UK does not have tropical jungles. The word “screen time” was added as this new concept based on the development of internet and computers

| 20 minutes | ● End this activity by designing 5-10 of your own alien or “made up” words. These words can represent an emotion that you do not think there is a word for. E.g. when you are angry because you are sleepy.

| 15 minutes | ● You will begin to understand why written language was developed as they explore oral language through the game of Chinese Whispers
● Chinese Whispers: listen to a story from someone in the family (please make sure this is not a common story that people know from before). Re-narrate the story to another family member. The third family member will narrate this story to another family member. Reflect on how this story changes as more and more people hear and retell it.

| 5 minutes | ● Practice oral memory by using a long number – this can be a random phone number, or someone’s full birthday, or 2 phone numbers together.
● You are not allowed to write this number down anywhere and we will test if you remember it tomorrow.

**DAY 2**

Today you will reflect on how difficult remembering things are and how important it is to remember things accurately.

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5 minutes

- Try to recall the number from yesterday. Then reflect on how difficult it is to remember and what are the things that are important to remember accurately?
- Begin exploring some of the older written languages. When people first started the written language, they used something called glyphs – instead of alphabets, which was pictures to represent words. These drawings were often done on stone walls before paper was invented
- For example: a girl, Luna, went out in the sun to fly a kite. It began to rain and her kite got wet and torn so Luna was sad.

15 minutes

- Make glyphs of 10 common words. Think of how they can draw these words so that everyone can understand them. It is important that this drawing also be easy to copy.
  - Two weather elements e.g. Rain and Wind
  - Two animals e.g. Dog and Parrot
  - Two places e.g. Home and School
  - Two people e.g. Mother and Friend
  - Two objects e.g. A Toy and Car

10 minutes

- Write a short 3-5 sentence letter in glyphs. E.g. a letter to your father to tell him you love him.

30 minutes

- Play a game of Pictionary with your family:
  - Preparation
    - 10 cards with words to be drawn e.g. Flower, Horse, Computer etc.
    - 2 or more teams with each team having 2 or more members
    - Paper, pencils and erasers or a board and chalk to draw
    - A paper with a points column for each of the teams
  - Rules
    - One team member from each team will pick 3 cards
    - The same team member will draw each of the words on the cards
    - The other team member will guess the word based on the picture
    - Each team gets as many points as the words they guess, with the maximum being 3 points per round
  - Add the total after playing one or two rounds of the game and compare the larger number to decide who won the game.

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Optional: to have an extension of the game, the cards can have full sentences that have to be drawn and guessed using glyphs.

# DAY 3

Today you will explore how language works for those with compromised vision or total blindness and similarly with those that are unable to hear.

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| 10 minutes          | ● Think of how you can communicate with someone who is deaf and cannot hear.  
                       ● Put some cotton in your ear and ask family members to whisper to be able to relate with the deaf.  
                       ● Sign language is the visual-manual language of those with hearing issues – people make words and letters using their hands.  
                       ● Examples:  
                          - eat / food  
                          - bathroom  
                          - help  
                          - finished  
                          - more  
                          - play |
| 5 minutes           | ● For those who do not have visual tools – pretend you are eating food that is often the sign for food and eating. Hold both hands up palms facing out that shows finished, etc. |
| 10 minutes          | ● Think of signs for 5 of the most common words you use.  
                       ● Now try and do a sentence by acting it out/ signing it out. |
| 30 minutes          | ● Play a game of Charades to understand communication by signing and acting it out.  
                       ● Preparation |

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- 10 cards with words to be acted / signed out e.g. Flower, Bird, Hungry etc.
- 2 or more teams with each team having 2 or more members
- Paper, pencils and erasers or a board and chalk to draw
- A paper with a points column for each of the teams

● Rules
- One team member from each team will pick 3 cards or think of other words to act out
- The same team member will act each of the words on the cards
- The other team member will guess the word based on the acting
- The team member acting out the words is not allowed to use verbal clues
- Each team gets as many points as the words they guess, with the maximum being 3 points per round.
- Add the total after playing a couple of rounds of the game and compare the larger number to decide who won the game.

5 minutes
- Explore how blind people read since they cannot see words or letters. Think of how you would help blind people read and write or say a few ideas.
- Explore the concept of Braille, which is a written language the blind can read through touching the letters.

15 minutes
- Use flour dough or playdough to make letters and words. Ask family members to close their eyes and feel these.
- Also, you can write letters and poke holes in the paper and flip it to touch the parts that are out and feel the letters.

DAY 4

Today you will explore code numerical languages.

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<tr>
<td>5 minutes</td>
<td>First say or write a few ideas about how you would write something in a code language that no one else can easily decipher or read.</td>
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<td>15 minutes</td>
<td>Explore numerical substitutions.</td>
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<td>Develop a code.</td>
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<td>- If A = 1, B = 2, C = 3 and so on. How will you write the word BAD i.e. B=2, A=1 and D = 4 so we get 2.1,4,</td>
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10 minutes  ● Write the entire code. E.g. what letters = what numbers
       ● Then write an entire sentence or words with this code.

30 minutes  ● Now create a different numerical code, some ideas of variations include:
       - Every letter is +2 from the previous letter e.g. A = 2, B= 2+2=4,
         C=4+2=6 etc.
       - Every letter is -3 from the previous letter e.g. Z = 100, Y= 100-3=97,
         X=97-3=94
       - Only even or odd number
       - Every letter is a number that ends with 10 e.g. A=10, B=20 etc.

       ● Make your own code, write a sentence in code and also the code-breaker that shares the code.

DAY 5

Today you will write a secret code of your own!

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<tr>
<td>20 minutes</td>
<td>● Hide two objects of your choice anywhere in your home and have family members find these using your own code oral language and code written language</td>
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<td>● To find the first hidden object, give family members an oral code cue that could be made up words and/or signed out for family members. For example, for an object hidden in the bed, sign out sleeping and bed for family members to guess that it is hidden in the bed.</td>
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<td>● To find the second hidden object, give family members a written code clue, you can use numerical substitution or glyphs, or both. For example, for an object hidden under a kitchen counter – draw spoons and knives as a glyph to give family members a hint.</td>
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<td>15 minutes</td>
<td>● Ask family members to break these codes and then find the two objects they have hidden.</td>
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<td>5 minutes</td>
<td>● Reflect on the power and evolution of language and write your own reflections based on what you thought was the most interesting for yourself.</td>
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ASSESSMENT CRITERIA

- Creativity in developing their own alien words, glyphs and signs
- Clarity of writing and drawings in letters
- Critical thinking in playing the games and ciphering and deciphering words
- Ability to write code breakers especially for the “numerical patterns”

MODIFICATIONS FOR SIMPLIFICATION

- Learners can focus on the instructions and cues given and not design their own codes