BRITISH COUNCIL

TeachingEnglish webinars for teachers

Teaching maths through English

Sarah Hillyard

13 January 2026

Supporting English teaching, learning and assessment

Training

Research

Resources

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Advice

Newsletter

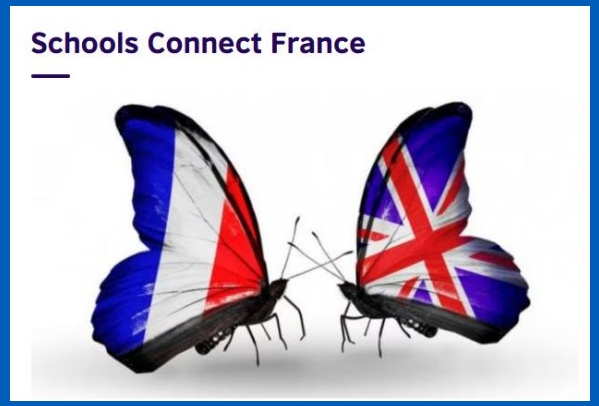
bitly

english.programmes@britishcouncil.fr

Training and exchange

TeachingEnglish

www.teachingenglish.org.uk



https://www.britishcouncil.fr/en/education/schools

Research and policy engagement

The current landscape of CLIL in primary education in France

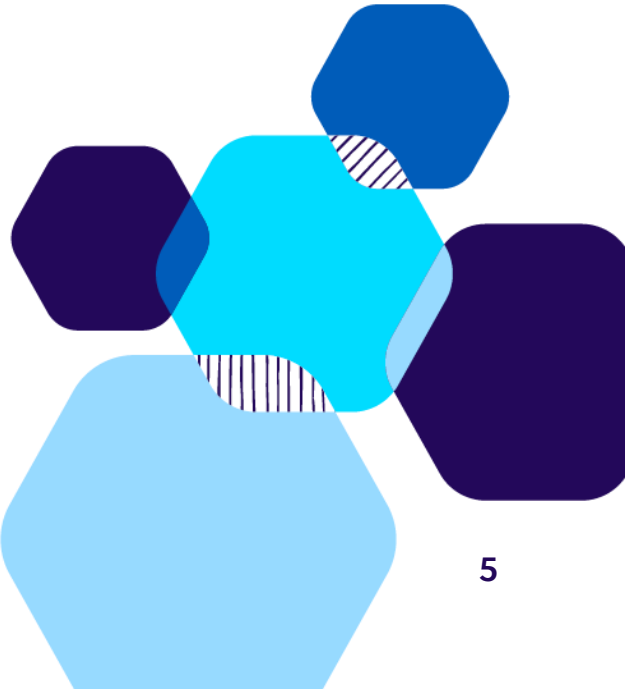
An exploratory study and recommendations for further research into Content and Language Integrated Learning (CLIL)

https://www.teachingenglish.org.uk/publications/case-studies-insights-and-research/current-landscape-clil-primary-education-france

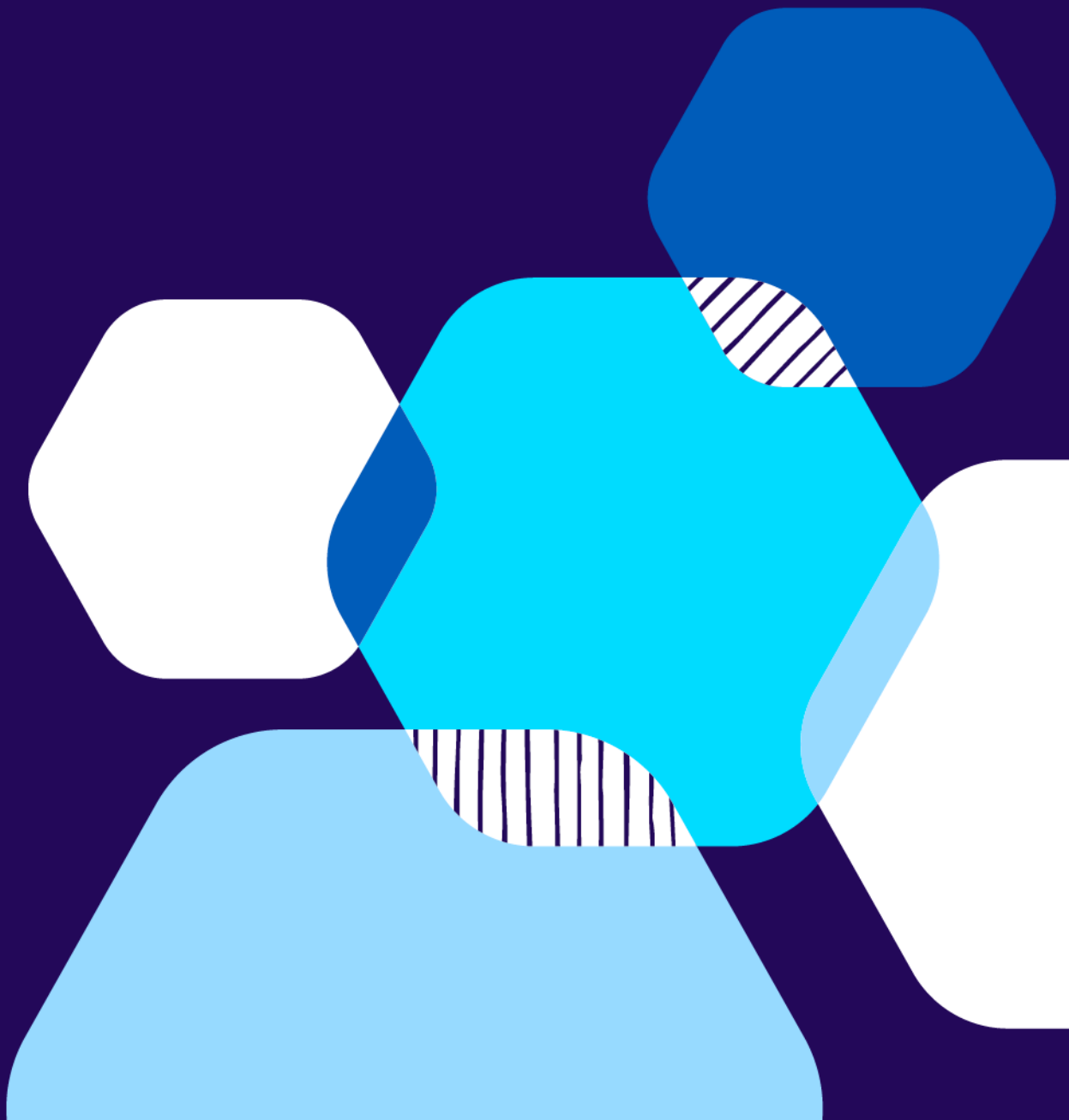
https://www.britishcouncil.fr/en/programmes/english-programmes/education/projects/clil

Session objectives

1. What is maths?
2. Maths through CLIL
3. Strategies for helping learners learn
4. Examples of good practice
5. Keeping motivation levels high

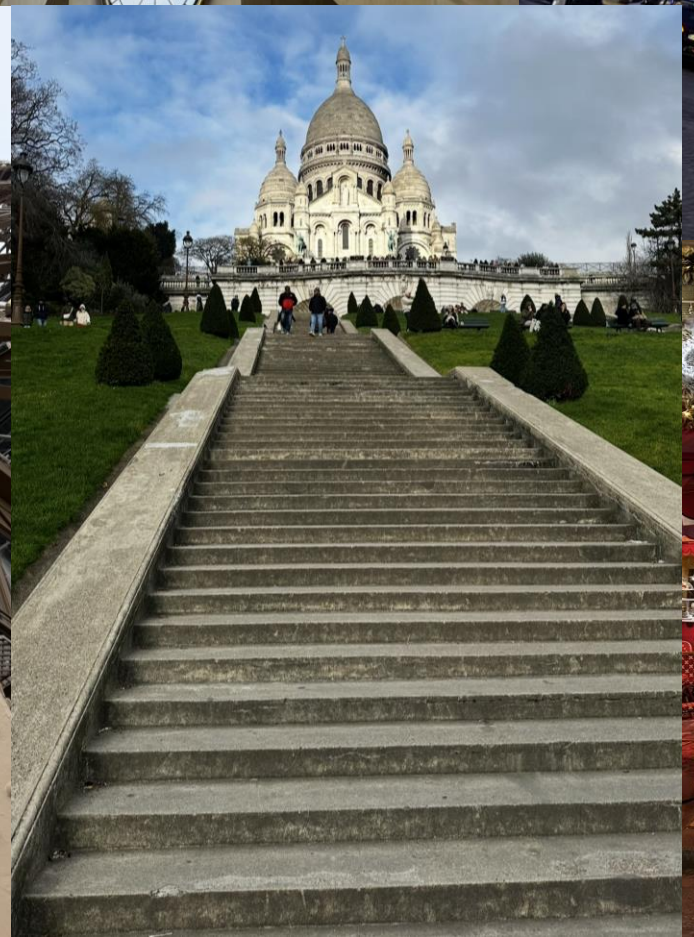


What is maths?







What is maths?

division

mental maths

money

size

coordinates

addition

graphs

estimation

geometry

multiplication

measurement

statistics

spatial relationships

equations

numbers

subtraction

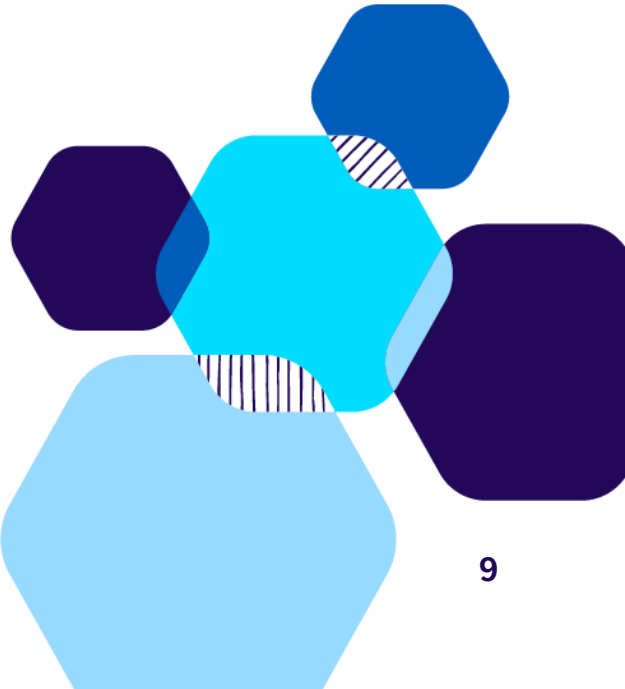
thinking

solving problems

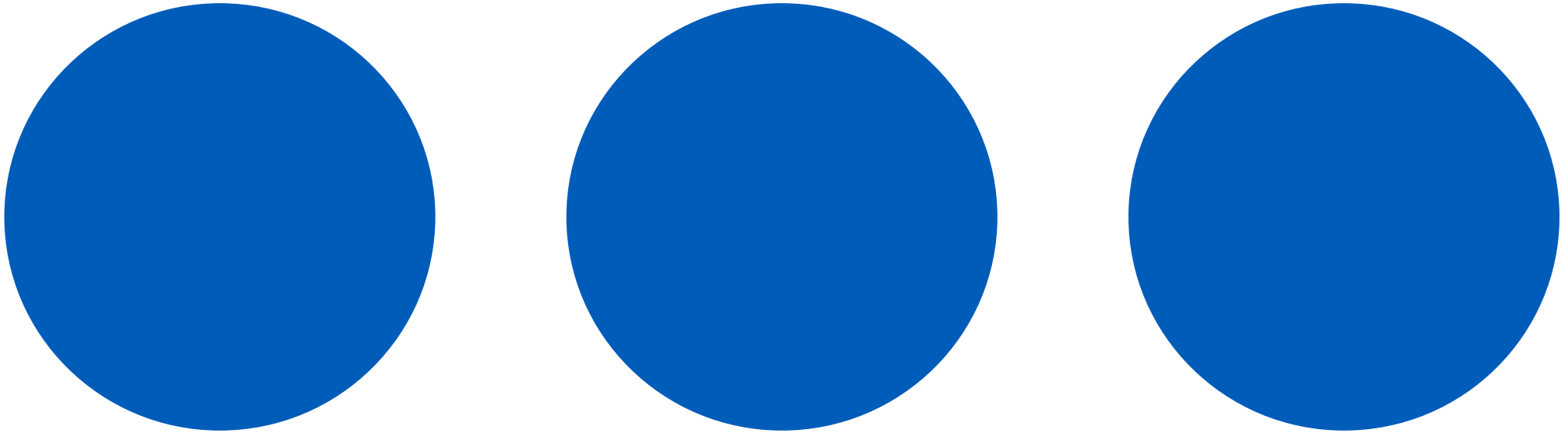
LIFE?

What do learners gain from maths through English?

- Mathematical concepts
- Dual proficiency
- Understanding of the practical uses of the language
- Development of life skills (thinking skills)
- Routines and other intentional moments



My life in numbers



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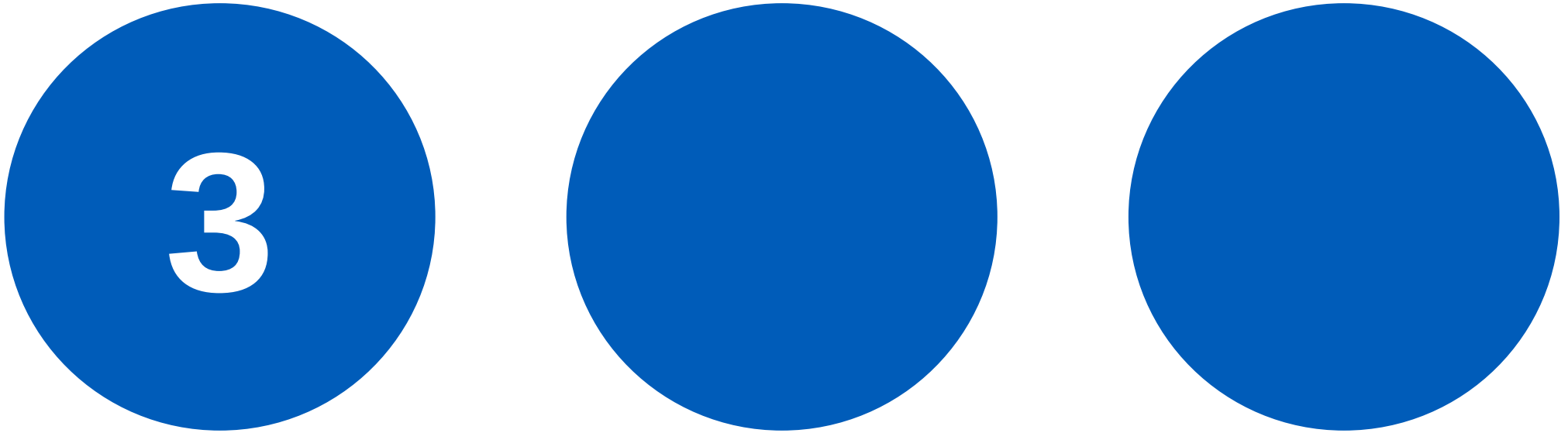
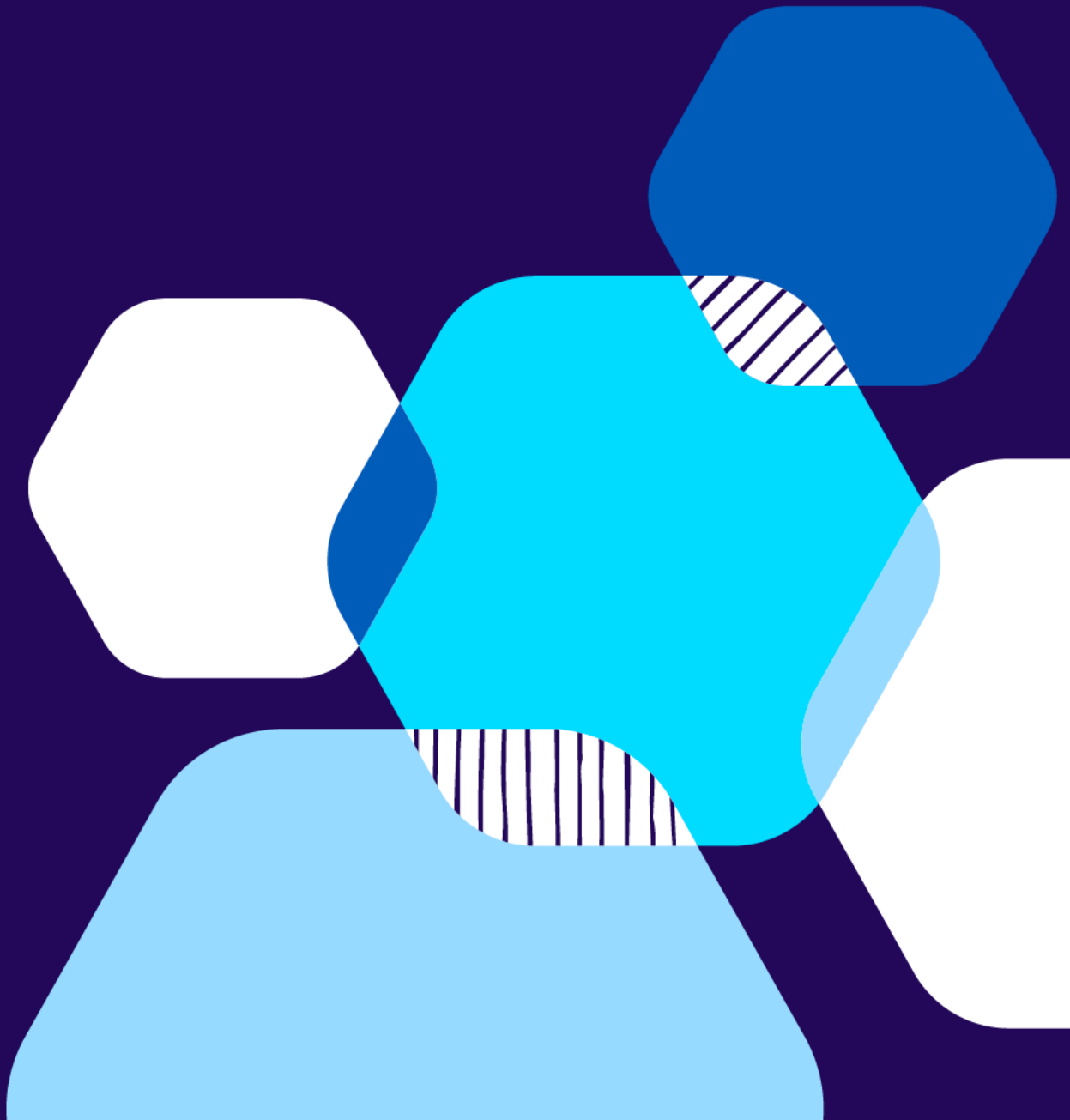


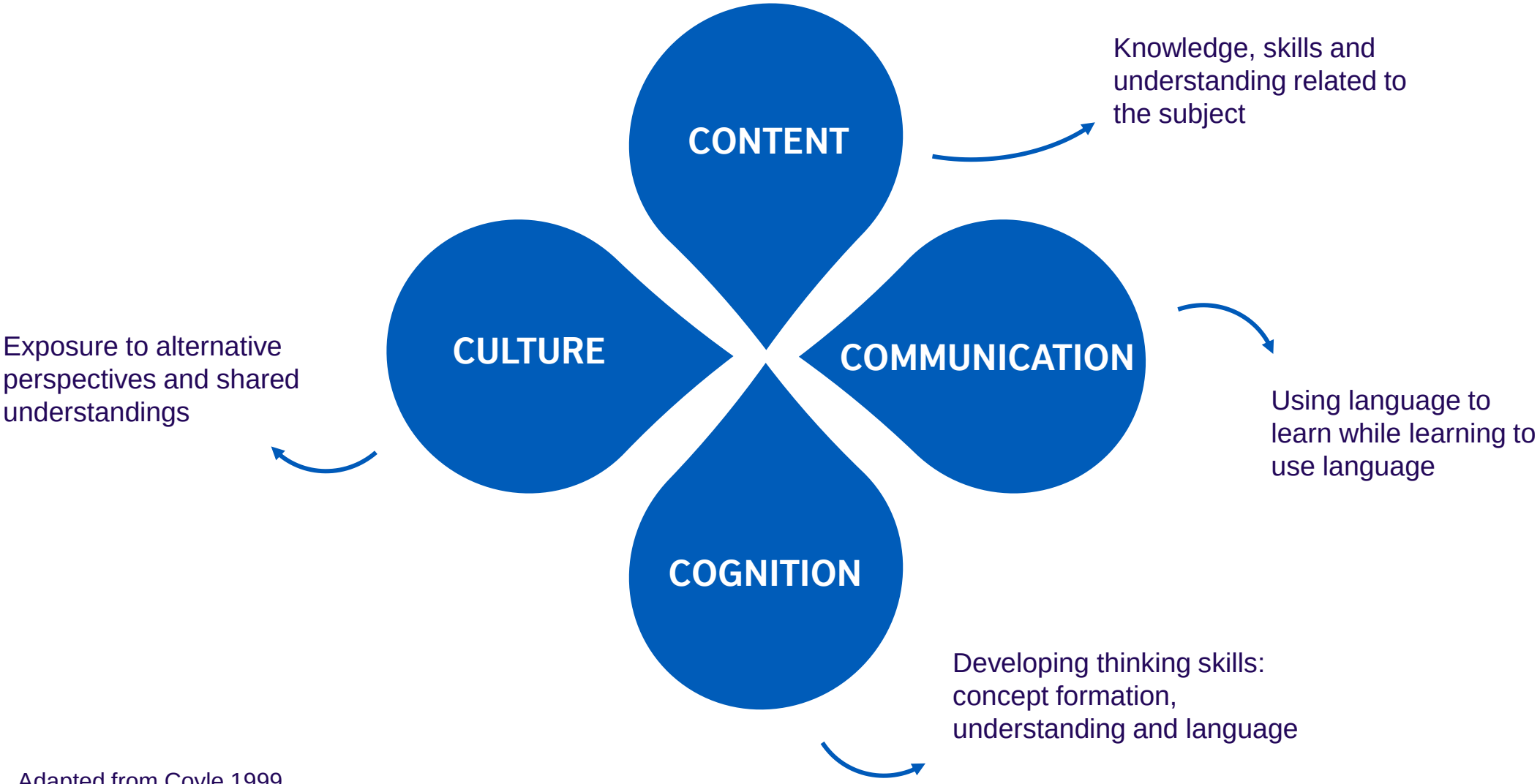
My life in numbers

My life in numbers

Maths through CLIL



Maths through Content and Language Integrated Learning (CLIL)



Adapted from Coyle 1999

“Are you taking any foreign language classes?”

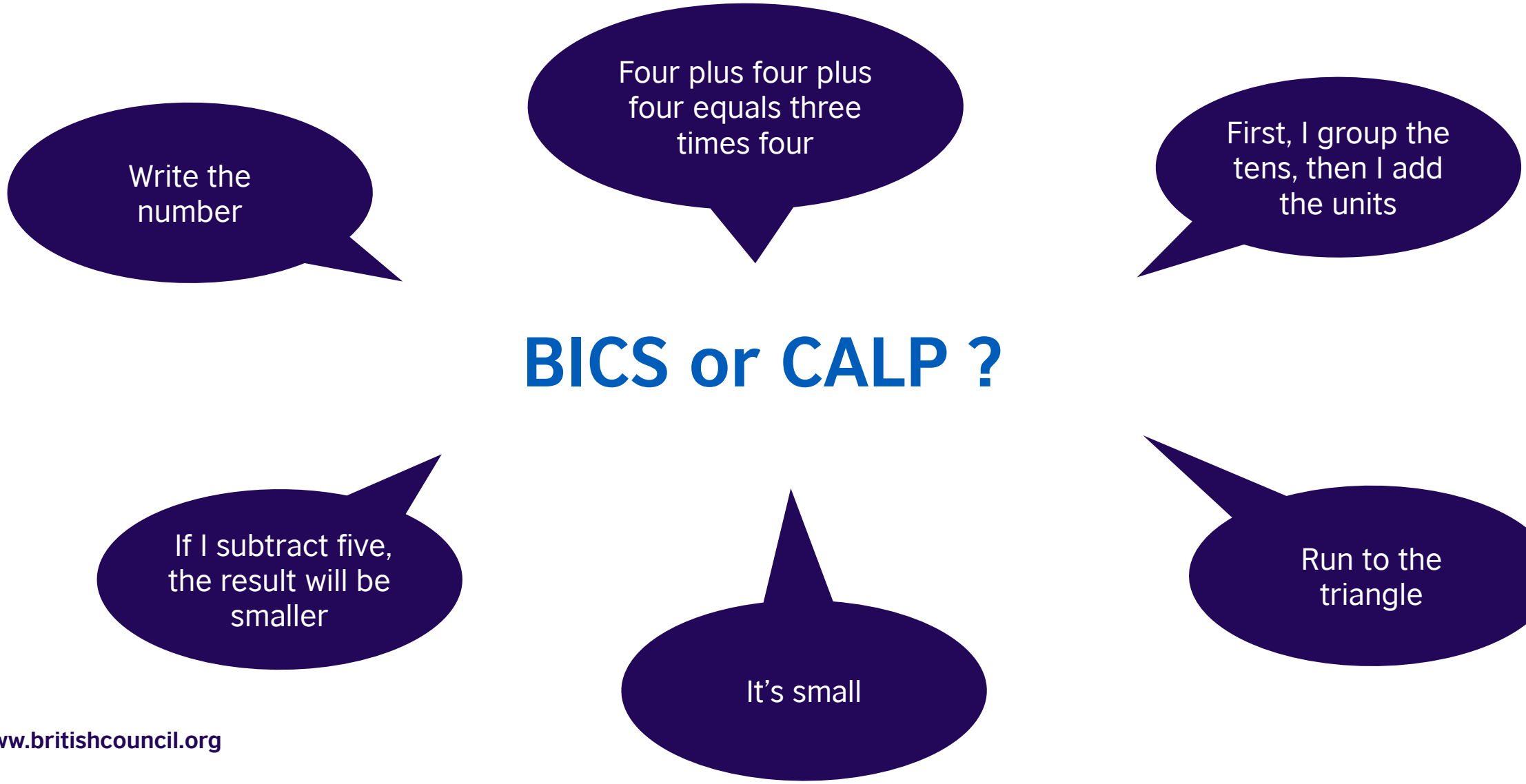
“Yes, maths.”

Table

© Sarah Hillyard

x	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

The language of maths through English



Why would you need this language in a maths class?

pencil, pencil case, ruler, book

in, on, under, in front of, behind, next to, between, to the right, to the left

playground, tree, monkey bars, bench, football pitch, basketball court

a clue,

the treasure

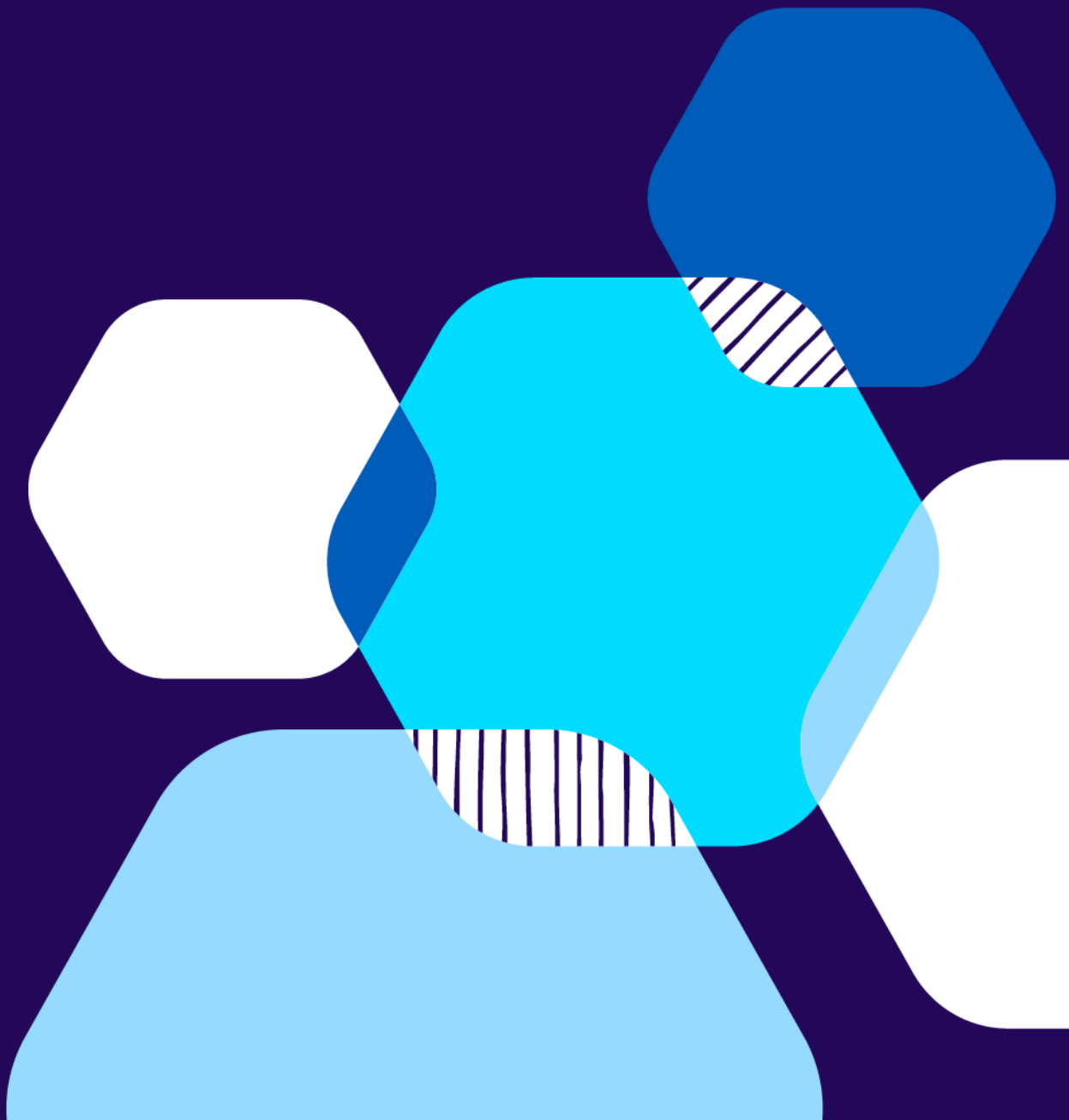
run, walk, hop, skip, run backwards

Spatial relationships

- **Pre-teach key language**: clue, treasure, playground vocabulary, prepositions
- **Treasure map dictation**: student A draws a treasure chest and describes where on the map. Student B should locate it and draw it on their map.
- **Treasure hunt in the playground**: get a clue, find the multiplication, solve it, and come back for another clue.
- **Kinaesthetic learning**: outdoor or indoor, requiring movement

"(Simon says) The pencil is in the pencil case. The pencil case is between two books".
"You are in the hoop. You are under the hoop. You are on the chair. You are to the right of the chair."
"The clue is between the trees / under the bench"
"Run / hop / skip to the bench"

Strategies for helping learners learn



What helps learners to learn?

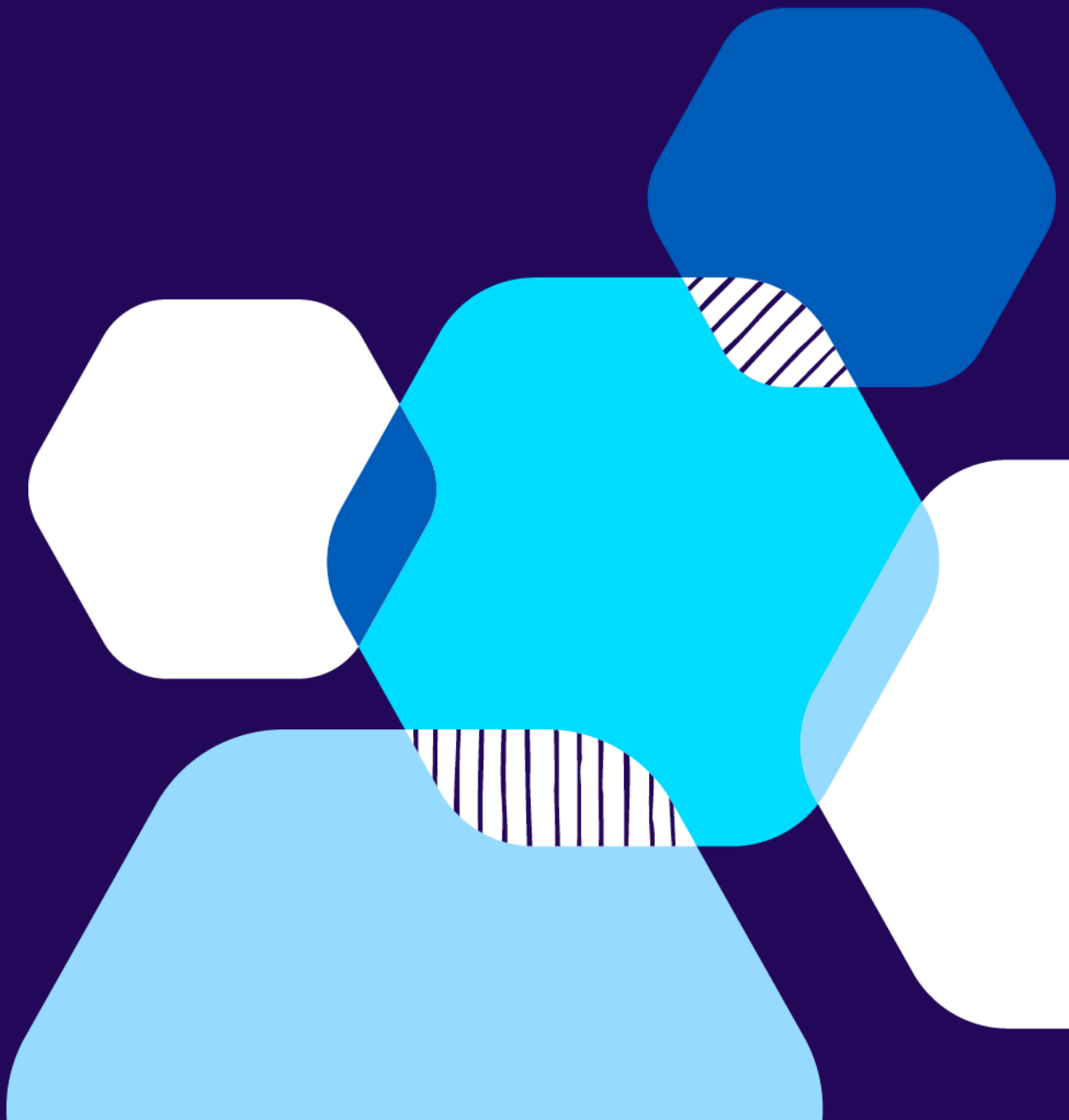
- Provide more key vocabulary on worksheets
- Provide more diagrams and pictures to clarify
- Provide more explanations
- Use easy words for explanations
- Simplify vocabulary
- Use games
- Provide L1 where necessary
- Have a list of vocabulary with illustrations

Adapted from Cambridge English: *Teaching Maths through English – a CLIL approach*
https://www.cambridgeenglish.org/Images/168751-teaching-maths-through-english-a-clil-approach.pdf
(Bentley and Philips, 2007)

So…

- **Visuals**: charts, diagrams, images, word walls
- **Manipulatives**: playing-cards, coins, wooden blocks, matchsticks
- **Hands-on and kinesthetic activities**
- **Games**
- **Stories, poems, art, songs, rhymes**
- **Real-life contexts**
- **Interactive and collaborative learning**: pair and group work
- **Scaffolding**: pre-teaching, sentence frames
- **Teaching how to think**: the development of strategies
- **Motivational tools / techniques**: interest, fun, choice
- **Principled use of first language (L1)**

Examples of good practice



Guessing games

The teacher can offer support by…

- drawing a **number line** and gradually erasing the numbers

1	2	3	4	5	6	7	8	9	10

- using **mathematical symbols < and >** to frame the number

- providing **sentence frames** for students to write their reasoning in their notebooks

I know that the number is larger than _____ and smaller than _____ .

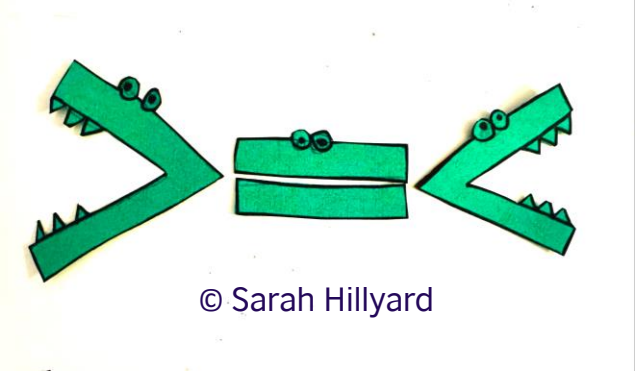
So, the number is between _____ and _____ .

The script!

I'm thinking of a number.
I'll write it.
Guess my number!

Is it …?

No, it's larger than / smaller than…



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Circle games

The teacher can offer support by …

- displaying a **number line.**
- **mirroring** the objective: *"I can count by fives".*

Simple circle clapping while counting (by fives).

One at a time. The group counts to 20 with students saying one number at a time. Anyone can start and anyone can continue the count. If two students happen to speak at the same time, counting must start again. The aim is to get to 20 with only one person saying each number.

21 out! Each student takes a turn and can **count up to three** numbers each time. Whoever is forced to say 21 is out.

Card games

The teacher can offer support by…

- doing a **quick pre-game as a revision** before the main game.
- **pre-teaching** the names of the playing cards, colours and suits.
- .

Don’t go over 100!

Multiplication War.

Go Fish for 10!

Literature

Band-Aids

By Shel Silverstein

I have a Band-Aid on my finger,
One on my knee, and one on my nose,
One on my heel, and two on my shoulder,
Three on my elbow, and nine on my toes.
Two on my wrists, and one on my ankle,
One on my chin, and one on my thigh,
Four on my belly, and five on my bottom,
One on my forehead, and one on my eye.
One on my neck, and in case I might need ‘em
I have a box of thirty-five more.
But oh! I do think it’s sort of a pity
I don’t have a cut or a sore!

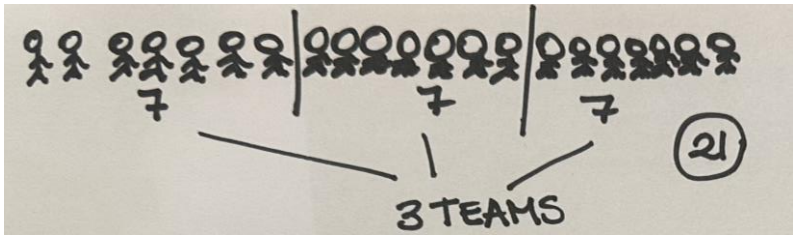
"Pure mathematics is, in its way, the poetry of logical ideas."

- Albert Einstein

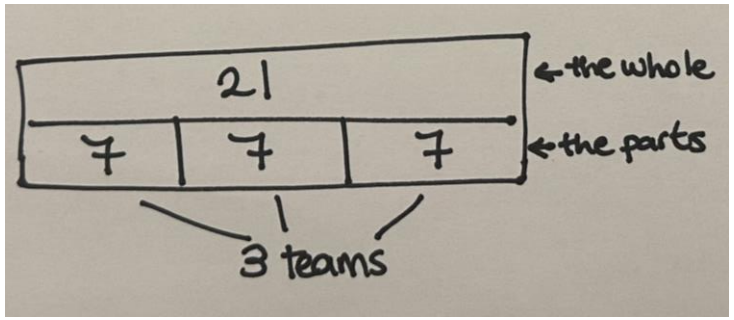
The importance of strategies

I can choose to…

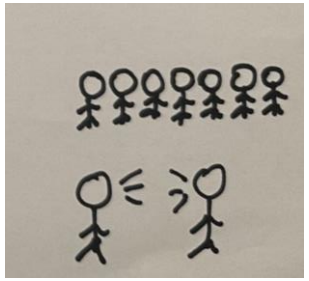
… make a drawing



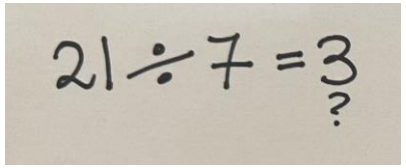
... make a strip diagram



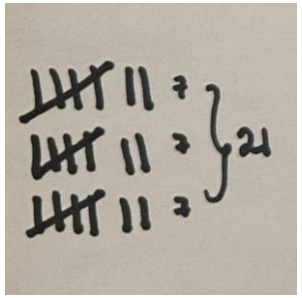
… act it out



… write a number sentence



… use tally marks



Which strategy would you use?

Songs, rhymes and stories

Odd and Even

Zero, two, four, six, eight
Being even is just great.
One, three, five, seven, nine
Being odd is just fine.

https://www.canteach.ca/resources/songs-poems/numbers/

Counting-out rhymes

Blue shoe, blue shoe,
How old are you?

Bubble gum, bubble gum in a dish,
How many pieces do you wish?

Stories

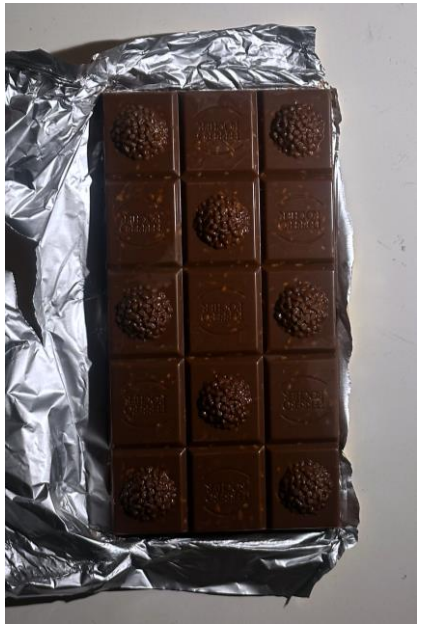
- The Very Hungry Caterpillar (Eric Carle)
- We Are The Shapes (Kevin Jenner)
- One to Ten and Back Again (Nick Sharratt & Sue Heap)
- Centipede's 100 Shoes (Tony Ross)
- How Big is a Million? (Anna Milbourne & Serena Riglietti)

Storytelling Handbook:
https://www.teachingenglish.org.uk/sites/teacheng/files/pub_D467_Storytelling_handbook_FINAL_web.pdf

Realia

The teacher can offer support by…

- Using **realia**.
- providing **sentence frames** for students to write their reasoning in their notebooks.
- **repeating the objective:** “I can match objects with a multiplication.”



T: How many rows?

*S: **There are** 2 **rows**.*

T: How many (biscuits) in each row?

*S: **There are** 3 **biscuits** in each row.*

T: So, all together…?

*S: **There are** 2 **rows of** 3 biscuits.*

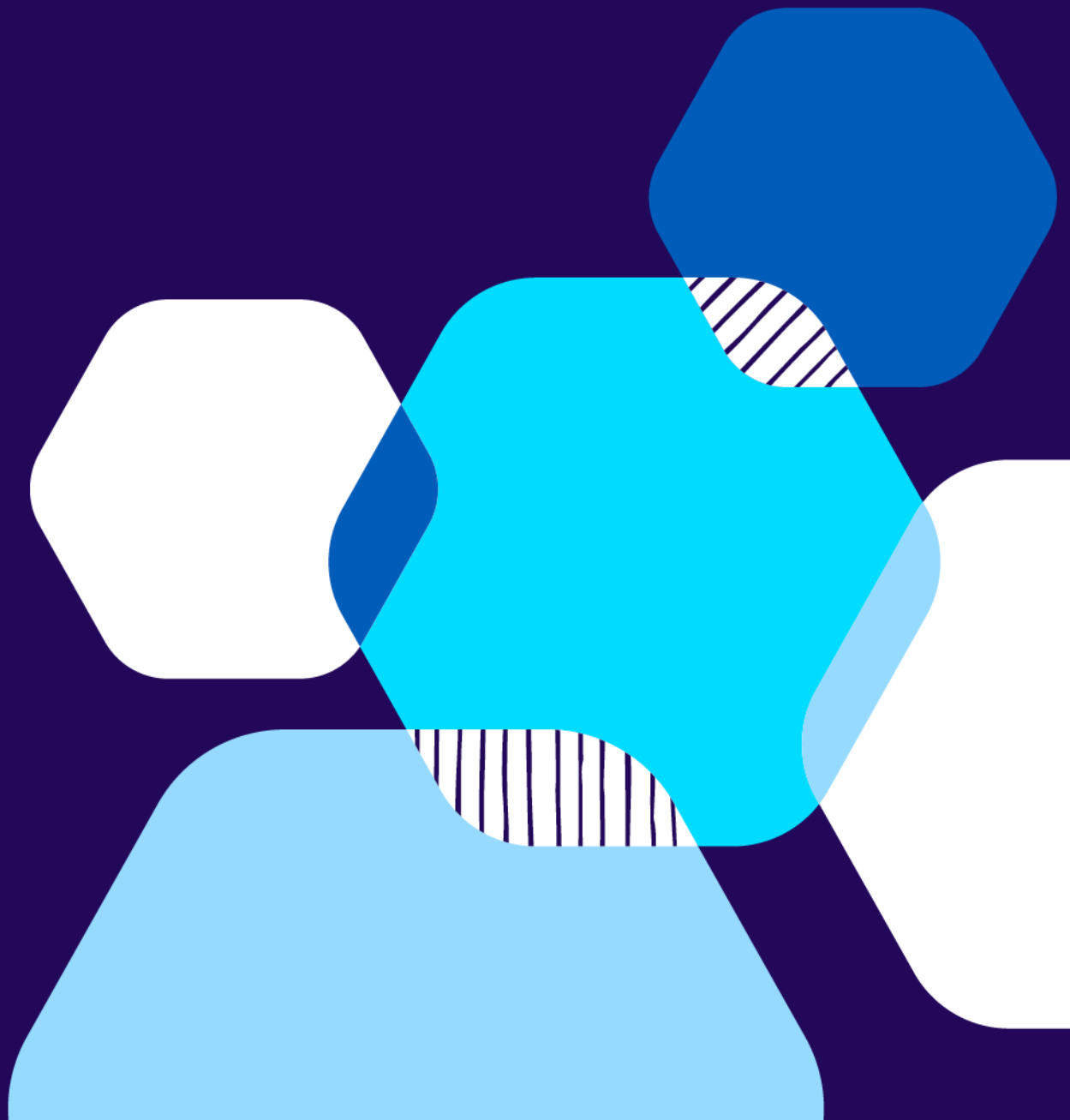
T: What does that make?

*S: **That makes** 2 **times** 3.*

T: So, how many (biscuits) are there? / What’s the result?

*S: **There are** 6 biscuits / **The result is** …*

Keeping motivation levels high



Mathematical brain breaks, teasers and jokes

- Limb count
- Pulse warm up
- Why was six afraid of seven?
- Multiply this number with any other number and you will always get the same answer. What's the number?
- Fast finisher sudoku

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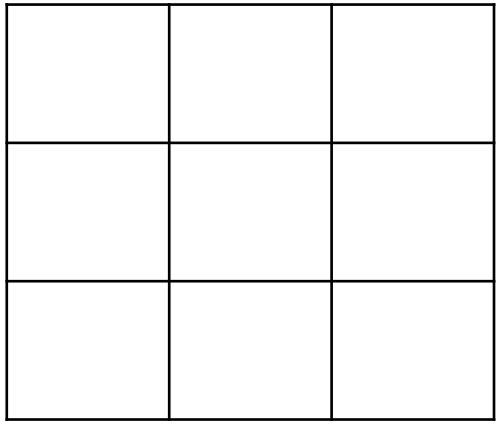


How many squares do you see?

Maths class management

“One, two, three, eyes on me!”

"One, two, buckle my shoe!"

"What is \(2+2\) in one, two, three?"

"If you can hear me, clap once."

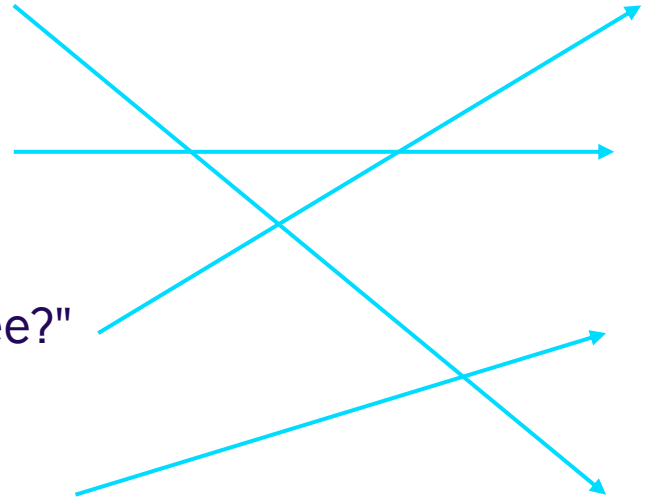
"Four”

"Three, four, knock at the door!"

(Clap once)

"One, two, eyes on you!"

Maths class management

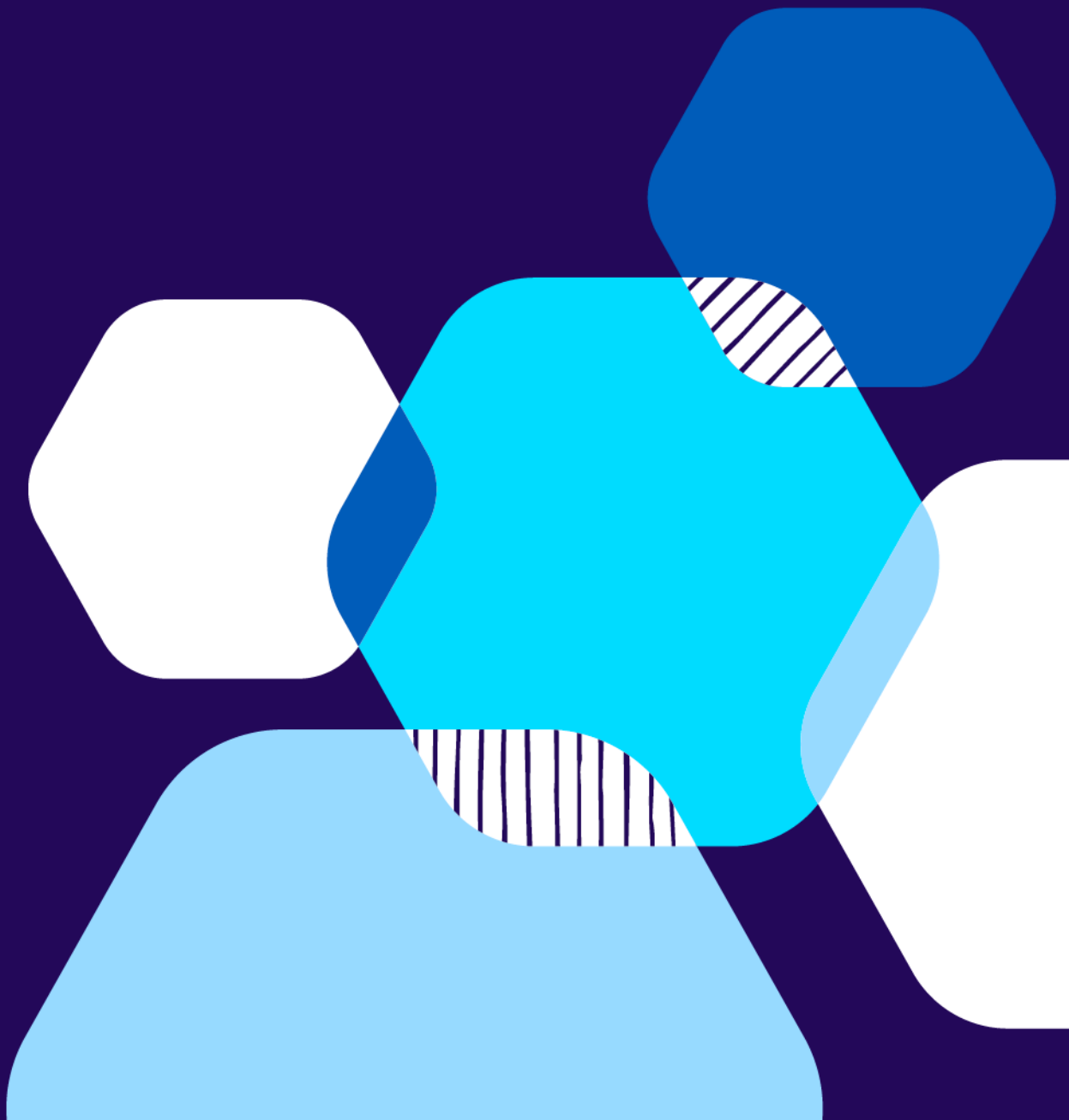


“One, two, three, eyes on me!”	"Four”
"One, two, buckle my shoe!"	"Three, four, knock at the door!"
"What is \(2+2\) in one, two, three?"	(Clap once)
"If you can hear me, clap once."	"One, two, eyes on you!"

Where to find resources?

- British Council TeachingEnglish : https://www.teachingenglish.org.uk/teaching-resources/teaching-primary/lesson-plans/level-2/numbers (Numbers)
- Learn English Kids: https://learnenglishkids.britishcouncil.org/grammar-vocabulary/grammar-practice/comparatives-superlatives (Comparatives and superlatives)
- BBC Bitesize online maths games: https://www.bbc.co.uk/bitesize/articles/zdjkjfr
- Oxford Owl maths: https://home.oxfordowl.co.uk/maths/
- Sheppard online games : https://www.sheppardsoftware.com/math.htm
- Math games: https://eng.mathgames.com/
- Outdoor maths games for everyone – Creative STAR Learning: https://mathsweek.scot/assets/images/25-Outdoor-maths-games-for-Everyone.pdf
- 100 ideas for teaching primary mathematics (Alan Thwaites – 2008)
- Teaching Mathematics Creatively (Linda Pound, Trisha Lee – 2010)

What is your key take-away?



To receive your certificate

Please complete this feedback form:
https://bit.ly/CLILmaths

Once you submit the form, you will see a link to download a certificate of attendance.

If you have any questions, contact english.programmes@britishcouncil.fr