Common Multiple Challenge

Purpose:
The purpose of this activity is to help your child practice finding common multiples of pairs of numbers.

Link to Number Framework:
Number Facts, Stages 7-8

What you need:
- A deck of cards with the face cards, 10s and jokers removed (aces count as).

What to do:
- Shuffle the cards and deal out two cards face up.
- Ask your child to name some multiples of each. Multiples are numbers you get when you multiply the number by another number. If your child knows their times tables this will be easy for them, for example, the multiples of 7 are 7, 14, 21, 28, 35, 42…
- Ask your child to identify one common multiple of the two numbers. The easiest way to do this is to multiply the two numbers together. For example, if the two numbers are 4 and 6, one common multiple is 24 (4x6).
- Ask your child to identify at least two more common multiples of the two numbers. They can find common multiples by doubling or tripling the first one they found (for example 48 and 72 are also common multiples of 4 and 6), but encourage them to look for others.
- Ask your child to identify the lowest common multiple of the two numbers. This may be the result of multiplying the two numbers together but often is not. For example, the lowest common multiple of 4 and 6 is 12. If one number is a multiple of the other then the lowest common multiple will be the higher number, for example the lowest common multiple of 3 and 6 is 6.
- Repeat the steps above with more random pairs of numbers.

What to expect your child to do:
- Know and use their times tables to at least 9x9
- Use and understand terms such as factors, multiples
- Find the lowest common multiple of pairs of numbers

Variations:
- This could be played as a game with a point given to the first person to identify the lowest common multiple of each pair of numbers
- You could increase the difficulty of the challenge by using one 2-digit and one 1-digit number.
- Challenge your child to find common multiples of three 1-digit numbers.

He Kupu Māori

multiple	taurea
common multiple	taurea pātahi
skip counting	tatau māwhitiwhiti
skip counting in fours	tatau mawhiti-whā

He Whakawhitinga Kōrero:
- Riwhiriwhia ngā kāri. Whakatakotoria kia rua ngā kāri, ko ngā mata ki runga. *(Shuffle the cards. Place down two cards, face up.)*

- He aha ngā taurea o tēnei tau? Tākina mai ngā taurea o tēnei tau. *(What are the multiples of this number? Recite the multiples of this number.)*
- Ko te whā tēnei tau. Tatauria mawhiti-whā. *(This is four. Skip count in fours.)*
- He aha ngā taurea pātahi o ēnei tau e rua? He taurea o tēnei tau, he taurea hoki o tēnei. *(What are the common multiples of these two numbers? Multiples of this number which are also multiples of this one.)*

Hei tauira, ko te 4 me te 6: *(For example, 4 and 6):*

- Whakareatia te 4 ki te 6. Ko te 24 te otinga. Nō reira, he taurea pātahi te 24 o te 4 me te 6. *(Multiply 4 by 6. The result is 24. So 24 is a common multiple of 4 and 6.)*
- He aha ētahi atu taurea pātahi o te 4 me te 6? *(What are some other common multiples of 4 and 6?*
- He taurea pātahi iti ake i te 24? *(Is there a common multiple that is smaller than 24?)*
- He aha te taurea pātahi iti rawa atu o te 4 me te 6? *(What is the lowest common multiple of 4 and 6?*