

## Parallel and Open Questions Grades K-3

| Strand | Open task | Parallel task |
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| Number Sense and Numeration | $\begin{array}{l}\text { There are tadpoles in a jar. The } \\ \text { amount of tadpoles is more than } \\ \text { 10 and less than 50. How many } \\ \text { tadpoles could there be in the jar. }\end{array}$ | $\begin{array}{l}\text { TASK \#1 } \\ \text { You land on the amount when } \\ \text { you count by 2's. How many } \\ \text { tadpoles could there be in the jar. } \\ \text { TASK \#2 } \\ \text { You land on the amount when } \\ \text { you count by both 2's AND 5's. } \\ \text { How many tadpoles could there } \\ \text { be in the jar? }\end{array}$ |
| Number Sense and Numeration |  | $\begin{array}{l}\text { There are clouds in the sky. } \\ \text { There are different colours of } \\ \text { clouds. } \\ \text { How many clouds of each colour } \\ \text { could there be? }\end{array}$ | \(\left.\left.\left.\begin{array}{l}TASK \#1 <br>

There are 12 clouds in the sky. <br>
There are 2 different colours of <br>
clouds. <br>
How many clouds of each colour\end{array}\right\} $$
\begin{array}{l}\text { could there be? }\end{array}
$$\right\} $$
\begin{array}{l}\text { TASK \#2 } \\
\text { There are 3 different colours of } \\
\text { clouds. One colour has twice as } \\
\text { many more than another. } \\
\text { How many clouds of each colour } \\
\text { could there be? }\end{array}
$$\right\}\)

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| Number Sense and Numeration | Jennifer is thinking of a number. The number has a " 4 " in it. What could Jennifer's number be? | Task \#1 <br> Jennifer's number is a 2 digit number where the second digit is a " 4 ". What could her number be? <br> Task \#2 <br> Jennifer's number is a 2 digit number that you land on when you count by 2's. |
| Patterning | What patterns could you make with 3 different shapes? | Task \#1 <br> You have 3 different shapes to make a pattern with. Make a pattern where it repeats according to one attribute. <br> Task \#2 <br> You have 3 different shapes to make a pattern with. <br> Make a pattern where the $4^{\text {th }}$ and the $8^{\text {th }}$ shape in your pattern are the same and are only used once in your pattern. |
| Measurement | An ant walked all the way around the outside of a cracker. How far did it walk? | Task \#1 <br> An ant walked all the way around the outside of a square shaped cracker. Each side measuring 3 cm in length. How far did the ant walk? <br> Task \#2 <br> An ant walked all the way around the outside of a rectangular shaped cracker. How far did the ant walk? |
| Data Management and Probability | Consider this set of data: $2,5,4,5,3$ <br> What might have been the survey question if these are the responses? | Task \#1 <br> Draw a bar graph to represent this data <br> Task \#2 <br> Represent this data in two different ways |
| Patterning | Consider the following sequence: $1,3,5,7 \ldots$. <br> What other numbers belong to this sequence? | Task \#1 <br> Consider the following sequence: $1,3,5,7 \ldots .$ <br> Does 50 belong to this sequence? <br> Task \#2 <br> Consider the following sequence: $1,3,5,7 \ldots \ldots$ <br> List only the numbers that end with 5 if the sequence goes to 100. |


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| Geometry and Spatial Sense | Look at these two shapes. How are they similar? How are they different? | Task \#1 <br> List the number of sides and vertices of these two shapes. <br> Task \#2 <br> List other shapes that share the same similarities of these two shapes. |
| Data Management and Probability | Look at the bar graph What might the survey question be? | Task \#1 <br> Write 3 questions to go with this bar graph <br> Task \#2 <br> Take the data in the bar graph and represent it in two other ways. |
| Measurement | Pete spent hours at the park in the morning. How long was he at the park for? | Task \#1 <br> Pete spent three hours at the park in the morning. What different times could he have been at the park for? <br> Task \#2 <br> Show the hours that Pete was at the park for in both digital and analogue time. |
| Measurement | The hour hand on a clock makes a half turn. What time could it be? | Task \#1 <br> The time is $12: 00$. List all of the times it would be when the hour hand continues to make a half turn. <br> Task \#2 <br> List 4 fractions of turns in which the hour hand moves on an analogue clock |
| Data Management and Probability | Tell of an even that is impossible, certain, likely, or unlikely to happen. | Task \#1 <br> The probability of an event is 5 in <br> 7. How likely is that even to occur? Explain your thinking. <br> Task \#2 <br> Design a spinner where the probability of landing on green is unlikely. |


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| Data Management and Probability | Make up two equations that use variables and that are true all of the time. Then make up another two equations that use variables and that are true only some of the time. | Option \#1 <br> You roll two dice. Is it more likely that the sum is 8 or that the difference is 2 ? <br> Option \#2 <br> You roll two dice. You want an event that is only a bit less likely than rolling a difference of 2. What could it be? |
| Patterning | A pattern begins like this: 2, 6, ... <br> How might it continue? | Option \#1 <br> Create a set of five pieces of data with a mean of 6 . No more than one of the values can be 6 . <br> Option \#2 <br> Create a set of five pieces of data including the values 4,2 , and 2 ; and where the mean is zero. |
| Data Management and Probability | Make up two equations that use variables and that are true all of the time. Then make up another two equations that use variables and that are true only some of the time. | Option \#1 <br> You roll two dice. Is it more likely that the sum is 8 or that the difference is 2 ? <br> Option \#2 <br> You roll two dice. You want an event that is only a bit less likely than rolling a difference of 2 . What could it be? |
| Geometry and Spatial Sense <br> Patterning | Draw a triangle with the following line of symmetry <br> Choose a start number between 1 and 10 Write the next 5 numbers in the pattern rule of your choice. | Task \#1 <br> Choose a start number between 1 and 10 . Use the pattern rule "add 2 each time". Write the first 5 numbers in the pattern. <br> Task \#2 <br> Write 3 different patterns rules starting at the number 3. |


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| Measurement | Give a time with the number 3 <br> representing a hour or minute | Task \#1 <br> Would a clock ever say 6:63? <br> Explain your thinking <br> Task \#2 <br> Starting at 3:00, write every time <br> in $1 ⁄ 2$ intervals for a 24 hour period |
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