## PlanBee D.T. Assessment : LIGHT-UP SIGNS: KS2

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|  | - Can children suggest reasons why it is helpful to illuminate signs? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children identify distinguishing features of a variety of illuminated signs? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children investigate ways in which very simple circuits for illuminated signage might be constructed? |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { N } \\ & \text { ᄃ } \\ & \text { む } \\ & \text { O} \end{aligned}$ | - Can children suggest some problems with using traditional, incandescent bulbs in products? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children suggest some aesthetic and practical reasons for using LEDs instead? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children construct a circuit with an LED? |  |  |  |  |  |  |  |  |  |  |  |
| m | - Can children identify potential audiences and purposes for a product design? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children make practical considerations about how to fit essential components in/on a product? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children consider tools and techniques they may need to use when constructing a product of their own design? |  |  |  |  |  |  |  |  |  |  |  |
| $\ddagger$ <br> 흥 <br> む | - Can children identify ways in which their existing designs could be adapted for the materials available? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children select appropriate tools and materials for construction of their design? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children identify ways in which they can work safely while constructing their design? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children recall how to create a simple series circuit with a light? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children select and use appropriate tools, materials and components to construct a circuit? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children decide on an appropriate way to fit electrical components inside their designs? |  |  |  |  |  |  |  |  |  |  |  |
| 0 <br> s <br> O <br> O | - Can children identify products which contain microcontrollers which control lights? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children make algorithms with simple sets of instructions which describe how a flashing LED is controlled? |  |  |  |  |  |  |  |  |  |  |  |
|  | - Can children write or edit programs to control an LED? |  |  |  |  |  |  |  |  |  |  |  |

