# Specification for additional Kodu Tiles

Last Updated

## Overview

This document details the additional tiles Rover will require to meet agreed designs. The below pages detail the following tiles:

* Inspect
* Beam
* Scan
* Photograph
* Rock Filter
* End Of Path

## Inspect

### Description

Action: Rover uses drill to inspect rock.

This takes X (SGI tuned value) seconds to complete.

### Purpose

* Either the player presses a button or the student’s code will action the Inspect tile.
* In some cases the player will have limited numbers of times they can use this action. (as indicated by color\_Y below)
* Rocks will need to recognize they have been inspected.
* There is animation, audio and visual affects required for this action

### Similar too

A gun that fires missiles with ammo.

### Example Usage

For Rover:

When See Rock Do Inspect…

Do Score\_Reduce Amount\_X Color\_Y Once

For Rock:

When Inspected Do Score\_Add Amount\_X Color\_Z Once

## Beam

### Description

Action: Rover uses laser beam to analyze rock.

This takes X (SGI tuned value) seconds to complete.

### Purpose

* Either the player presses a button or the student’s code will action the Beam tile.
* The use of this action is unlimited
* Rocks will need to recognize they have been Beamed.
* There is animation, audio and visual affects required for this action

### Similar too

A gun that fires missiles without ammo.

### Example Usage

For Rover:

When See Rock CloseBy Do Beam It

When Bump Rock Do Beam It

For Rock:

When Beamed Do Score\_Add Amount\_X Color\_Z Once

## Scan

### Description

Action: Rover uses a scan to uncover the type of rocks in a radius of X (SGI tuned value) for 360 around the rover.

This takes X (SGI tuned value) seconds to complete.

### Purpose

* Either the player presses a button or the student’s code will action the Scan tile.
* Rocks will need to recognize they have been Scanned and automatically swap meshes.
* There is animation, audio and visual affects required for this action

### Similar too

Playing a noise or performing an expression.

### Example Usage

For Rover:

When *<Event>* Do Scan

## Photograph

### Description

Action: Rover takes a picture of what is in front of it. The viewpoint will be from the Rover’s main camera atop the mast. FOV as standard for First Person View. Taking a photo of a rock has no effect on the rock.

### Purpose

* Either the player presses a button or the student’s code will action the inspect tile.
* There is audio required for this action. There may also be animation and visual affects.

### Similar too

* Performing an expression
* Tech exists to take screenshot via the F12 button on the PC. Image is saved to hard drive at standard location.

### Example Usage

For Rover:

When *<Event>* Do Photograph

## Rock Filter

### Description

An expansion of the existing categories of rock, the filter allows the player to specify which of the 2 possible rocks or 2 unknown rock types.

Depending on the level, SGI will need to place down both high and low value rocks that are visible and also high and low value rocks that are unknown until scanned or bumped.

### Purpose

* This will allow the Kode to recognize which rock has been interacted with and provide consequential actions.

### Similar too

Specifying a color

**Example Usage**

For Rover:

When Inspected Rock\_Type\_A Do reduce # remaining drill bits

For Rock [type A]:

When Inspected Rock\_Type\_A Do Score points

## End of Path

### Description

An expansion of the existing Kodu path system. An Event that fires when When the self game object reaches the end of a path.

**Purpose**

* To provide Kodu feedback from the game objects behavior in game. I.e. Once the rover has reached the end of a path Do…

**Similar too**

Bump

**Example Usage**

For Rover:

When EndOfPath Color\_X Do *<Action>*