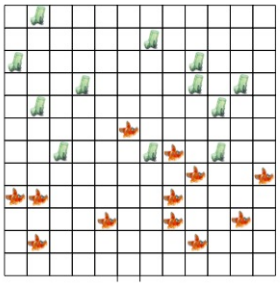
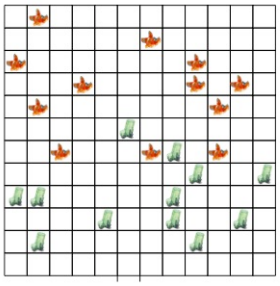
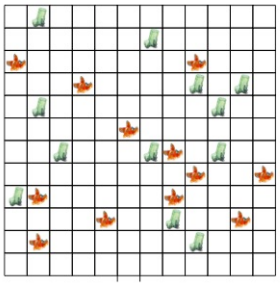
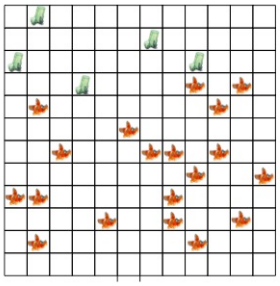
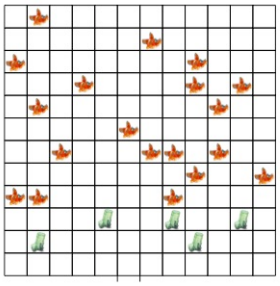
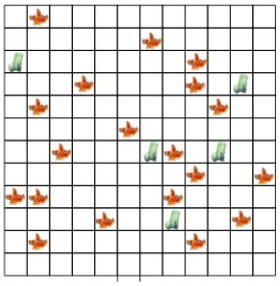
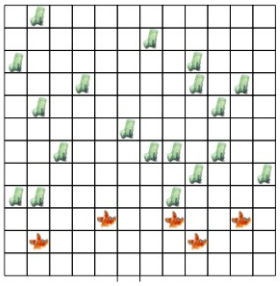
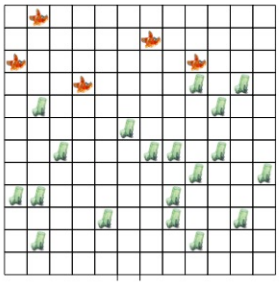
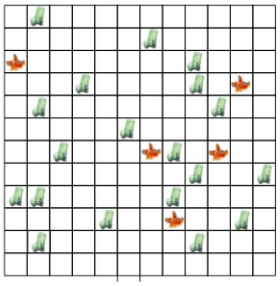
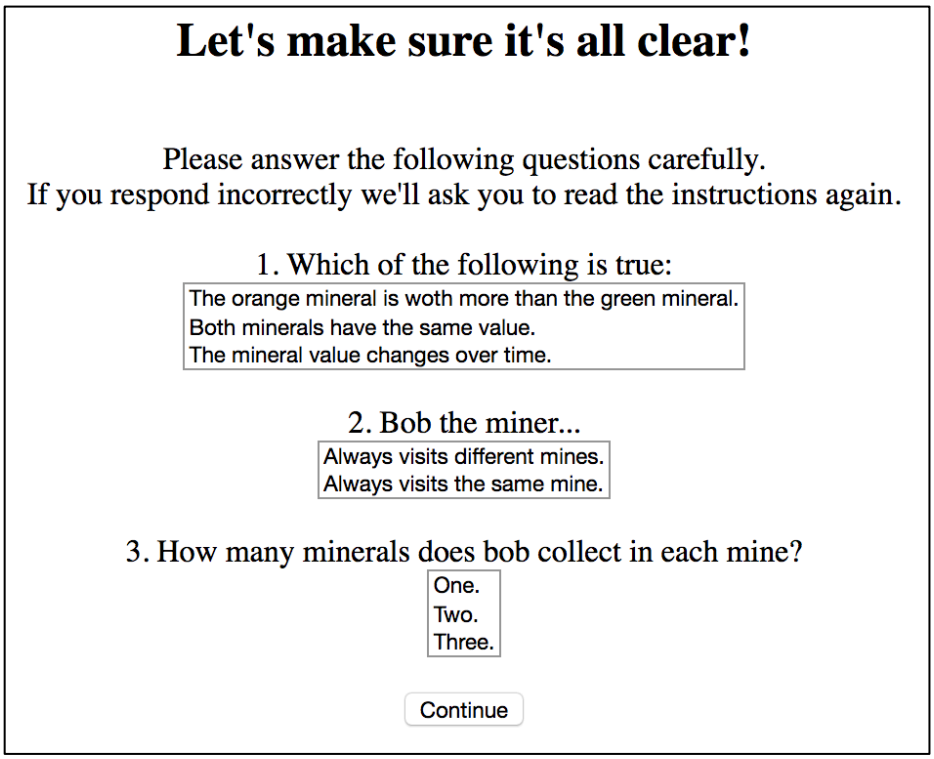
Maps

Equal proportions			
Majority red			
Minority red			
	Red closer	Red farther	Intermixed

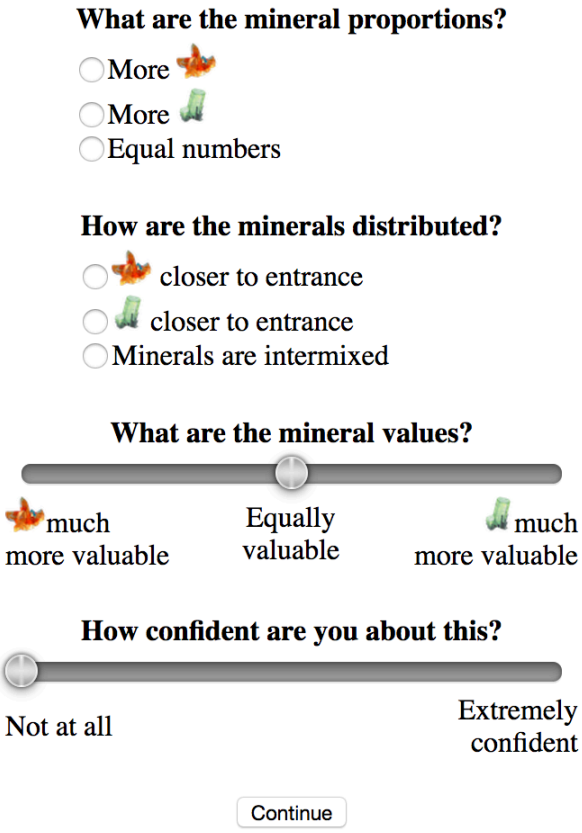
Access to the experiment questions

After reading the task description, participants were presented with the following screen.



Participants had to respond all three questions correctly to gain access to the experiment. The correct answer to question one was “The mineral value changes over time”, the correct answer to the second question was “always visits different mines.” And the correct answer to the third question was either “one” or “three” depending on the condition (“one” in the condition where the miner collected one mineral per trip, and “three” for the conditions where the miner collected three minerals in one trip, and the condition where the miner collected three minerals in three trips.

Screenshot of questions asked in each trial



Compound model details

Results from regression training the Efficiency+Statistical model using participant judgments on preference inferences:

	Estimate	P-value
Intercept	-1.9e-17	1
Efficiency prediction	0.814	<2e-16
Statistical prediction	-9.74e-02	0.068

Results from regression training the Spatial+Statistical model using participant judgments on preference inferences:

	Estimate	P-value
Intercept	1.33e-17	1
Spatial prediction	0.3702	0.0129
Statistical prediction	0.2723	0.0637

Results from regression training the Efficiency+Statistical model using participant judgments on confidence judgments:

	Estimate	P-value
Intercept	-2.5e-17	1
Efficiency prediction	0.325	1.22e-6
Statistical prediction	0.037	0.56

Results from regression training the Spatial+Statistical model using participant judgments on confidence judgments:

	Estimate	P-value
Intercept	1.28e-17	1
Spatial prediction	-0.165	0.09
Statistical prediction	0.263	0.0083