Scoring Guide: Signals from the Cosmos- Deciphering Messages from the Stars

	1	2	3	4
Scoring	Attempted	Partial	Proficient	4 Distinguished
Criteria	Demonstration	Demonstration	Demonstration	Demonstration
Content Knowledge	Student attempts to describe the	Student partially describes the	Student accurately describes,	Student accurately describes, in
Students'	evolution of a supernova. Major	evolution of a supernova. Some	the evolution of a supernova	rich detail, the evolution of a
understanding of the	details are missing and/or	details may be missing or	including descriptions of	supernova including rich and
structure and	contains major errors.	contains minor errors.	formation and destruction	vivid descriptions of formation
evolution of			and the ongoing process of	and destruction and the ongoing
supernovae, including			star formation.	process of star formation.
the radiation emitted				Student provides sophisticated
from it.				and/or insightful details.
Understandings	Student attempts to describe	Student partially describes how	Student accurately describes	Student accurately describes, in
about Scientific	how scientists gather and	scientists gather and analyze	how scientists gather and	detail, how scientists gather and
Inquiry	analyze data about supernovae	data about supernovae and how	analyze data about	analyze data about supernovae
Students	and how this data is used to	this data is used to understand	supernovae and how this data	and how this data is used to
understanding of how	understand supernovae. Student	supernovae. Student provides at	is used to understand	understand supernovae. Student
scientists gather data	may neglect to relate findings	least one example that relates to	supernovae. Student provides	provides clear and specific
about objects, such as	to the supernova being	the particular supernova being	examples that relate to the	examples that directly relate to
supernovae, and	described in the task. Several	described in the task. Some	particular supernova being	the particular supernova being
explain phenomena in	details may be missing or	details may be missing or	described in the task.	described in the task.
our universe.	contain major errors.	contain minor errors.		
Data Collection and	Student attempts to create a	Student partially analyzes data	Student accurately analyzes	Student clearly, accurately, and
Analysis	story/picture of the supernova,	from the web site and creates a	data from the web site and	precisely analyzes data from the
Students' ability to	but it is not evident that data	story/picture of the supernova,	creates a story/picture of the	web site and creates an insightful
interpret information,	from the web site was used and	partially based on the data. Some	supernova, based on the data.	story/picture of the supernova,
analyze data, and draw conclusions	analyzed. Several details may	details may be missing or contain minor errors.		clearly based on the data.
draw conclusions	be missing or contain major errors.	contain minor errors.		
Communication	The medium that was chosen	The medium that was chosen	The medium that was chosen	The medium that was chosen
Students' ability to	does not effectively	partially communicates the story	effectively communicates the	clearly and effectively
effectively	communicate the story of the	of the supernova to the intended	story of the supernova to the	communicates the story of the
communicate	supernova to the intended	audience.	intended audience.	supernova to the intended
scientific ideas and	audience.	addience.	intended addrence.	audience.
findings.	addience.			audience.
Accessing	Student provides an incomplete	Student provides appendix of	Student provides appendix of	Student provides appendix of all
Information	appendix of web resources	most of the web resources used	all the web resources used	the web resources used and it is
Students' ability to	used. It may not be clear how	although it may not be clear	and it is evident that the	clearly evident that the web
use computers to	they were used for the task.	how some resources were used	sources cited were used for	sources cited were appropriate
access information		for the task.	the task.	and used for the task.
for research				