SCIENCE SCORING RUBRICS AND SCORING SUMMARY FORM

Circle the score given for each rubric.

PLANNING

Review these Task 1 & 2 sources for evidence to support score:

Task 1 *Context Form*
Context Commentary
Task 2 *Lesson Plans*
Instructional Materials
Planning Commentary

S1 Establishing a balanced instructional focus	1	2	3	4
S2 Making content accessible	1	2	3	4
S3 Designing assessments	1	2	3	4

ASSESSMENT

Review these Task 4 sources for evidence to support score:
Evaluative Criteria or Rubric
Student Work Samples
Assessment Commentary
(and consider previously reviewed Task 1, 2, & 3 sources)

S6 Analyzing student work from an assessment	1	2	3	4
S7 Using assessment to inform teaching	1	2	3	4
S8 Using feedback to promote student learning	1	2	3	4

INSTRUCTION

Review these Task 3 sources for evidence to support score:
Video Clip(s)
Lesson Plan
Instruction Commentary
(and consider previously reviewed Task 1 & 2 sources)

S4 Engaging students in learning	1	2	3	4
S5 Monitoring student learning during instruction	1	2	3	4

REFLECTION

Review these Task 5 sources for evidence to support score:
Daily Reflections
Reflective Commentary
(and consider previously reviewed Task 1, 2, 3, & 4 sources)

S9 Monitoring student progress	1	2	3	4
S10 Reflecting on learning	1	2	3	4

ACADEMIC LANGUAGE

Consider evidence from all Teaching Event tasks to support score.

S11 Understanding language demands	1	2	3	4
S12 Supporting academic language development	1	2	3	4

Candidate ID: _____

Scorer ID: _____

CONFIDENCE IN RATINGS

Overall, how confident are you in the ratings that you gave this candidate? *(Circle one)*

Not confident Somewhat confident Confident Very confident

HOLISTIC IMPRESSION OF PERFORMANCE IN TEACHING EVENT

(Circle one)

We would like to collect your impression of the performance in the Teaching Event independent of the PACT scoring system. Please use your personal criteria for judging beginning teaching to answer the following question: If the evidence of teaching practice in this Teaching Event were typical of a candidate's current level of practice, what would be your recommendation with respect to awarding them a teaching credential? *(Circle one number)*

1	2	3	4
Would not recommend for a Teaching Credential at this time (candidate's areas of weakness cause concerns for being the teacher of record)	Recommendation for a Teaching Credential (has areas of strength that will carry candidate while s/he works on areas that need improvement)	Strong recommendation for a for a Teaching Credential (solid foundation of beginning teaching skills)	Strong recommendation with distinction for a Teaching Credential (exceptional performance for a beginner)

Comments/Concerns/Interesting Issues raised by this Teaching Event (record more general comments/concerns on your Scorer Feedback form):

Do you know this candidate? _____ Yes _____ No

If yes, in what role? *(Check all that apply.)* _____ Supervisor _____ Instructor _____ Other _____
(Please describe role)

Please check here if you recommend this Teaching Event as a potential benchmark for next year: _____

Candidate ID: _____

Scorer ID: _____

PLANNING — ESTABLISHING A BALANCED INSTRUCTIONAL FOCUS **S1: How do the plans support student learning of scientific concepts and inquiry skills?** (TPEs 1,4,9)			
Level 1	**Level 2**	**Level 3**	**Level 4**
• The standards, learning objectives, learning tasks, and assessments either have **no central focus or a one-dimensional focus** (e.g., solely on a scientific phenomenon, science concept, or investigation/ experimentation skills).	• The standards, learning objectives, learning tasks, and assessments have an overall focus that is **primarily one-dimensional** (e.g., a scientific phenomenon, science concept, or investigation/experimentation skills). • The focus includes **vague connections** among science concepts, real world phenomena, and investigation/experimentation skills.	• Learning tasks ***or*** **the set of assessment tasks** focus on multiple dimensions of science learning through **clear connections** among science concepts, real world phenomena, and investigation/ experimentation skills. • A **progression** of learning tasks and assessments is planned to build understanding of the central focus of the learning segment.	• Both learning tasks ***and*** **the set of assessment tasks** focus on multiple dimensions of science learning through clear connections among science concepts, real world phenomena, and investigation/ experimentation skills. • A progression of learning tasks and assessments guides students to build **deep understandings** of the central focus of the learning segment.

Key evidence that supports the assigned score:

Score: _____

Candidate ID: _____

Scorer ID: _____

PLANNING	MAKING CONTENT ACCESSIBLE		
S2: How do the plans make the curriculum accessible to the students in the class? (TPEs 1,4,5,6,7,8,9)			
Level 1	**Level 2**	**Level 3**	**Level 4**
• Plans **refer** to students' experiential backgrounds[1], interests, or prior learning[2] that have **little or no relationship** to the learning segment's standards/objectives. OR • There are **significant content inaccuracies** in plans that will lead to student misunderstandings.	• Plans **draw on** students' experiential backgrounds, interests, or prior learning to **help students reach** the learning segment's standards/objectives. • Plans for the implementation of learning tasks include **support[3] to help students** who often struggle with the content.	• Plans draw on students' prior learning **as well as** experiential backgrounds or interests to help students reach the learning segment's standards/objectives. • Plans for learning tasks include **scaffolding or other structured forms of support[4]** to provide **access to grade-level** standards/objectives.	All components of Level 3 plus: • Plans include **well-integrated** instructional strategies that are **tailored** to address **a variety of specific student learning needs.**

Key evidence that supports the assigned score:

Score: _____

[1] Cultural, linguistic, social, economic
[2] In or out of school
[3] Such as strategic groupings of students; circulating to monitor student understanding during independent or group work; checking on particular students.
[4] Such as multiple ways of representing content; concrete models; modeling strategies of scientific inquiry; providing graphic organizers, rubrics, or sample work.

PLANNING DESIGNING ASSESSMENTS **S3: What opportunities do students have to demonstrate their understanding of the standards and learning objectives?** (TPEs 2,3)			
Level 1	**Level 2**	**Level 3**	**Level 4**
• There are **limited** opportunities provided for students to learn what is measured by assessments. OR • There is a **significant mismatch** between one or more assessment instruments or methods and the standards/objectives being assessed.	• Opportunities are provided for students to **learn what is assessed.** • It is not clear that the assessment of one or more standards/objectives go beyond **surface-level** understandings.	• Opportunities are provided for students to learn what is assessed. • The assessments allow students to show **some depth of understanding or skill** with respect to the standards/objectives. • The assessments **access both productive (speaking/writing) and receptive (listening/reading) modalities** to monitor student understanding.	All components of Level 3 plus: • Assessments are **modified, adapted, and/or designed** to allow students with special needs opportunities to demonstrate understandings and skills relative to the standards/objectives.

Key evidence that supports the assigned score:

Score: _____

Candidate ID: _____

Scorer ID: _____

INSTRUCTION — ENGAGING STUDENTS IN LEARNING **S4: How does the candidate actively engage students in their own understanding of collecting, analyzing, and interpreting scientific data?** (TPEs 1,5,11)			
Level 1	**Level 2**	**Level 3**	**Level 4**
• Students have **limited opportunities** in the clips to engage with content in ways likely **to improve their abilities to collect, analyze, and interpret scientific data.** OR • The clips **do not focus** on collecting and analyzing scientific data. OR • Classroom management is problematic and **student behavior interferes with learning** or there are **safety violations** visible on the videotape posing an immediate danger to students.	• Strategies for intellectual engagement seen in the clips offer **opportunities for students to collect, analyze, and interpret scientific data.** • If needed for the activity, **safety measures are taken.**	• Strategies for intellectual engagement seen in the clips offer **structured opportunities** for students to **actively** collect, analyze, and interpret scientific data. • These strategies reflect **attention to student characteristics, learning needs, and/or language needs.** • **No potential safety problems** are visible in the videotapes.	• Strategies for intellectual engagement seen in the clips offer structured opportunities for students to actively collect, analyze, and interpret scientific data. • These strategies are **explicit, and clearly reflect attention** to students with diverse characteristics, learning needs, and/or language needs. • No potential safety problems are visible in the videotapes.

Key evidence that supports the assigned score:

Score: _____

Candidate ID: _____

Scorer ID: _____

INSTRUCTION — MONITORING STUDENT LEARNING DURING INSTRUCTION **S5: How does the candidate monitor student learning during instruction and respond to student questions, comments, and needs?** (TPEs 2,5)			
Level 1	**Level 2**	**Level 3**	**Level 4**
• The candidate primarily monitors student understanding by asking **surface-level questions** and evaluating student responses as **correct or incorrect**. • Candidate responses are **not likely to promote student thinking.** OR • Materials or candidate responses include **significant content inaccuracies** that will lead to student misunderstandings or misconceptions.	• The candidate monitors student understanding by **eliciting student responses that require thinking about science concepts and the quality of data.** • Candidate responses represent **reasonable attempts to improve student abilities to collect, analyze, and interpret scientific data.**	• The candidate monitors student understanding by eliciting student responses that require thinking about science concepts and the quality of data. • Candidate responses **build on student input to guide improvement** of students' abilities to collect, analyze, and interpret scientific data.	All components of Level 3 plus: • The candidate **elicits explanations** of student thinking about science concepts and the quality of data, and uses these explanations to **further the understanding** of all students.

Key evidence that supports the assigned score:

Score: _____

Candidate ID: _____

Scorer ID: _____

ASSESSMENT — ANALYZING STUDENT WORK FROM AN ASSESSMENT **S6: How does the candidate demonstrate an understanding of student performance with respect to standards/objectives?** (TPEs 1,3)			
Level 1	**Level 2**	**Level 3**	**Level 4**
• The criteria/rubric and analysis have **little connection** with the identified standards/objectives. OR • Student **work samples do not support the conclusions** in the analysis.	• The criteria/rubric and analysis **focus on what students did right or wrong** in relationship to identified standards/objectives. • The analysis of whole class performance describes **some differences in levels** of student learning for the content assessed.	• The criteria/rubric and analysis **focus on patterns of student errors, misconceptions, skills, and understanding** to analyze student learning in relation to standards/objectives. • Specific patterns are identified for **individuals or subgroup(s)** in addition to the whole class.	All components of Level 3 plus: • The criteria/rubric and analysis focus on **partial understandings** as well. • The analysis is **clear and detailed.**

Key evidence that supports the assigned score:

Score: _____

Candidate ID: _____

Scorer ID: _____

ASSESSMENT	USING ASSESSMENT TO INFORM TEACHING		
S7: How does the candidate use the analysis of student learning to propose next steps in instruction? (TPEs 3,4)			
Level 1	**Level 2**	**Level 3**	**Level 4**
• Next steps are **vaguely related to or not aligned with the identified** student needs. OR • Next steps are **not described in sufficient detail** to understand them. OR • Next steps are **based on inaccurate conclusions** about student learning from the assessment analysis.	• Next steps focus on improving student performance through **general support that addresses some identified student needs.** • Next steps are **based on accurate conclusions about student performance** on the assessment and are described in sufficient detail to understand them.	• Next steps focus on improving student performance through **targeted support** to individuals and groups to address specific **identified-needs.** • Next steps are **based on whole class patterns** of performance and **some patterns for individuals and/or subgroups** and are described in sufficient detail to understand them.	All components of Level 3 plus: • Next steps demonstrate a **strong understanding** of both the identified **content and language standards/objectives** and of **individual students and/or subgroups.**

Key evidence that supports the assigned score:

Score: _____

Candidate ID: _____ 7 Scorer ID: _____ October 23, 2008

ASSESSMENT	USING FEEDBACK TO PROMOTE STUDENT LEARNING		
S8: What is the quality of feedback to students? (TPEs 3,4)			
Level 1	**Level 2**	**Level 3**	**Level 4**
• Feedback is **general and provides little guidance for improvement** related to learning objectives. OR • The feedback contains **significant inaccuracies**.	• The feedback **identifies what was done well and areas for improvement** related to specific learning objectives.	• Specific **feedback helps the student understand what s/he has done well**, and gives **suggestions to guide improvement.**	• Specific comments are **supportive** and **prompt analysis by the student of his/her own performance**. • The feedback shows **strong understanding of students as individuals** in reference to the content and language objectives they are trying to meet.

Key evidence that supports the assigned score:

Score: _____

Candidate ID: _____

Scorer ID: _____

REFLECTION MONITORING STUDENT PROGRESS **S9: How does the candidate monitor student learning and make appropriate adjustments in instruction during the learning segment?** (TPEs 2,10,12,13)			
Level 1	**Level 2**	**Level 3**	**Level 4**
• Daily reflections indicate **inconsistent monitoring** of student performance. • There is **limited evidence of adjusting** instruction in response to observed problems, e.g., student confusion, a lack of challenge, time management.	• Daily reflections **identify what students could or could not do within each lesson**. • Adjustments to instruction are focused on **improving directions for learning tasks, time management, or reteaching.**	• Daily reflections indicate **monitoring of student progress** toward meeting the standards/objectives for the learning segment. • Adjustments to instruction are focused on **addressing some individual and collective learning needs**.	All components of Level 3 plus: • Adjustments to instruction are **focused on deepening key skills and understandings related to using science concepts and inquiry skills to explain a scientific phenomenon.**

Key evidence that supports the assigned score:

Score: _____

Candidate ID: _____

Scorer ID: _____

REFLECTION	REFLECTING ON LEARNING		
S10: How does the candidate use research, theory, and reflections on teaching and learning to guide practice? (TPEs 10,11,12,13)			
Level 1	**Level 2**	**Level 3**	**Level 4**
• Reflections on teaching practice are **erroneously supported through a significant misapplication** of theory or research principles. OR • Changes in teaching practice are ***not*** **based on reasonable assumptions** about how student learning was affected by planning, instruction, or assessment decisions.	• Reflections on teaching practice are **consistent with principles** from theory and research. • Changes in teaching practice are **based on reasonable assumptions** about how student learning was affected by planning, instruction, or assessment decisions.	• Reflections on teaching practice are based on **sound knowledge of research and theory linked to knowledge of students** in the class. • Changes in teaching practice are based on reasonable assumptions about how student learning was affected by planning, instruction, or assessment decisions.	• Reflections on teaching practice **integrate** sound knowledge of **research and theory** about effective teaching practice, **knowledge of students** in the class, and **knowledge of content.** • Changes in teaching practice are **specific and strategic** to improve **individual and collective** student understanding of standards/objectives.

Key evidence that supports the assigned score:

Score: _____

Candidate ID: _____

Scorer ID: _____

ACADEMIC LANGUAGE UNDERSTANDING LANGUAGE DEMANDS

S11: How does the candidate describe the language demands of the learning tasks and assessments in relation to student language development? (TPEs 1,4,7,8)

Level 1	Level 2	Level 3	Level 4
• The candidate identifies few demands related to the four language **modalities (speaking, listening, reading, writing)** and the discussion is **limited to what students CANNOT do.** • The candidate **identifies some of the key oral and written text types**[5] in the learning segment, **but does not describe the features of the text types.** • The candidate **lists key terms associated with a topic without identifying other vocabulary demands related to the linguistic or educational experiences of students.**	• The candidate **identifies what students at different levels of language development are ABLE to do as well as what they may struggle to do to meet the language demands**[6] **in different modalities (speaking, listening, reading, and writing).** • The candidate **identifies key oral and written text types and describes organizational, stylistic, and/or grammatical features of each.** • The candidate goes **beyond listing key terms associated with a topic by identifying words and phrases that students from different backgrounds may find challenging**[7]	• The candidate **discusses students' strengths and challenges in meeting language demands in different modalities in relation to their different linguistic backgrounds and/or prior educational experience.** • The candidate **links organizational, stylistic, and/or grammatical features of the text types to disciplinary and/or cultural norms and expectations.** • The candidate goes beyond listing key terms associated with a topic by identifying words and phrases that students from different backgrounds may find challenging, **and articulates the importance of these terms for specific learning or assessment tasks.**	• The candidate discusses students' strengths and challenges in meeting language demands in different modalities in relation to their different linguistic backgrounds and/or prior educational experiences, **representing the full range of students in the class.** • The candidate links organizational, stylistic, and/or grammatical features of the text types to disciplinary and/or cultural norms and expectations, **and identifies the learning opportunities offered by the texts.** • The candidate goes beyond listing key terms associated with a topic in identifying words and phrases that students from different backgrounds may find challenging, and articulates the importance of these terms for specific learning or assessment tasks.

Key evidence that supports the assigned score:

Score: _____

[5] Text types can be oral (e.g., formal presentations, role play activities, arguments during a debate, partner or group discussions) and/or written (e.g., graphs and charts, equations, scientific lab reports).

[6] In addition to text types, examples might include understanding a teacher's oral presentation of information, responding to a question in class, listening to or reading directions, sharing information orally with a partner, or compiling information on a graphic organizer.

[7] For example, common words that are new to English learners, synonyms used interchangeably, content terms with distinctive meanings from their everyday equivalents

ACADEMIC LANGUAGE SUPPORTING ACADEMIC LANGUAGE DEVELOPMENT S12: How do the candidate's planning, instruction, and assessment support academic language development? (TPEs 1,4,7,8)			
Level 1	**Level 2**	**Level 3**	**Level 4**
• The candidate gives **little or sporadic support to students** to meet the language demands of the learning tasks. OR • **Language and/or content is oversimplified** to the point of limiting student access to the core content[8] of the curriculum.	• The candidate uses scaffolding or other support[9] to **address identified gaps** between students' current language abilities and the language demands of the learning tasks and assessments. • These supports **provide immediate access to core content** without providing opportunities for students to develop further language proficiency.	• The candidate's use of scaffolding or other support provides access to core content while also providing **explicit models, opportunities for practice, and feedback for students to develop further language proficiency** related to the demands of the learning tasks and assessments. • The candidate **articulates why** the instructional strategies chosen **are likely to support** specific aspects of students' language development.	• The candidate's use of scaffolding or other support provides access to core content while also providing explicit models, opportunities for practice, and feedback for students to develop further language proficiency related to the demands of the learning tasks and assessments. • The candidate **articulates why** the instructional strategies chosen **are likely to support** specific aspects of students' language development and **projects ways** in which **the scaffolds can be removed** as proficiency increases.

Key evidence that supports the assigned score:

Score: _____

[8] Core content is the set of facts, concepts, skills, and abilities that are absolutely necessary to participate at least minimally in the learning/assessment tasks in the learning segment.

[9] Such support might include one or more of the following: modeling strategies for comprehending or constructing texts such as lab reports; explicit communication of the expected features of oral or written texts (e.g., using rubrics, models, and frames); use of strategies that provide visual representations of content while promoting literacy development (e.g., graphic organizers); vocabulary development techniques (context cues, categorization, analysis of word parts, etc.); opportunities to work together with students with different language and literacy skills.