In Appendix K the following text and table should be included before the beginning of the section titled "Course Map 2—Science Domains Model (grades 6–8 and 9–12)" on p. 123:

<div align="center">

NEXT STEPS EXAMPLE:
MIDDLE SCHOOL REVISION 2,
STATE SPECIFIC MODEL

</div>

As mentioned in the introductory section, the middle school and high school standards are grade banded due to the fact that standards at these levels are handled differently in different states. As states move forward toward adoption these models should be referenced for guidance on how to arrange the performance expectations (PEs). States are encouraged to edit the sample models and turn them into state specific models to reflect an organization that works best for the state. There are many unique factors that may influence a state's decision to arrange the PEs in a particular way.

The following is an example of a state revision where the focus is on revising the Conceptual Progressions Course Map described in Table K-1. This revision was developed by California's Science Expert Panel (SEP), a group comprised of kindergarten through grade 12 teachers, scientists, educators, business industry representatives, and informal science educators.

The SEP used the following criteria to arrange the PEs for middle school grades six, seven, and eight:

1. PEs were placed at each grade level so that they support content articulation across grade levels (from fifth through eighth grade) and provide the opportunity for content integration within each grade level.
2. Performance expectations were aligned with the Common Core State Standards (CCSS) in English Language Arts (ELA) and Mathematics so that science learning would not be dependent on math skills not yet acquired.
3. The final arrangement of PEs reflected a balance both in content complexity and number at each grade level with human impact and engineering PEs appropriately integrated.

In addition to these criteria, the SEP worked to ensure that the PEs could be bundled together in various ways to facilitate curriculum development.

TABLE K-3A California Integrated Learning Progressions Model—Middle School

The table below connects the middle school NGSS performance expectations to the component ideas from the *Framework*. These connections are taken from the information in the NGSS foundation boxes. In this table, the component ideas are arranged into courses based on California's revised organization.

Course 1

DCI	PE
PS3.A	MS-PS3-3.
PS3.A	MS-PS3-4.
PS3.B	MS-PS3-5.
LS1.A	MS-LS1-1.
LS1.A	MS-LS1-2.
LS1.A	MS-LS1-3.
LS1.B	MS-LS1-4.
LS1.B	MS-LS1-5.
LS1.D	MS-LS1-8.
LS3.A	MS-LS3-2.
ESS2.C	MS-ESS2-4.
ESS2.C	MS-ESS2-5.
ESS2.C	MS-ESS2-6.
ESS3.C	MS-ESS3-3.
ESS3.D	MS-ESS3-5.
ETS1.A	MS-ETS1-1.
ETS1.B	MS-ETS1-2.
ETS1.B	MS-ETS1-3.
ETS1.B	MS-ETS1-4.
ETS1.C	MS-ETS1-3.
ETS1.C	MS-ETS1-4.

COURSE 1 Repeats

DCI	PE
PS3.B	MS-PS3-3.
PS3.B	MS-PS3-4.
LS1.B	*MS-LS3-2.*
LS3.B	MS-LS3-2.
ESS2.D	MS-ESS2-5.
ESS2.D	MS-ESS2-6.

Course 2

DCI	PE
PS1.A	MS-PS1-1.
PS1.A	MS-PS1-2.
PS1.A	MS-PS1-3.
PS1.A	MS-PS1-4.
PS1.B	MS-PS1-5.
PS1.B	MS-PS1-6.
LS1.C	MS-LS1-6.
LS1.C	MS-LS1-7.
LS2.A	MS-LS2-1.
LS2.A	MS-LS2-2.
LS2.B	MS-LS2-3.
LS2.C	MS-LS2-4.
LS2.C	MS-LS2-5.
ESS2.A	MS-ESS2-1.
ESS2.A	MS-ESS2-2.
ESS2.B	MS-ESS2-3.
ESS3.A	MS-ESS3-1.
ESS3.B	MS-ESS3-2

COURSE 2 Repeats

DCI	PE
PS1.B	MS-PS1-2.
PS1.B	MS-PS1-3.
PS3.A	*MS-PS1-4.*
PS3.D	*MS-LS1-6.*
PS3.D	*MS-LS1-7.*
LS4.D	*MS-LS2-5.*
ESS2.C	MS-ESS2-2.
ETS1.A	MS-ETS1-1.
ETS1.B	MS-ETS1-2.
ETS1.B	MS-ETS1-3.
ETS1.B	MS-ETS1-4.
ETS1.C	MS-ETS1-3.
ETS1.C	MS-ETS1-4.

Course 3

DCI	PE
PS2.A	MS-PS2-1.
PS2.A	MS-PS2-2.
PS2.B	MS-PS2-3.
PS2.B	MS-PS2-4.
PS2.B	MS-PS2-5.
PS3.A	MS-PS3-1.
PS3.A	MS-PS3-2.
PS4.A	MS-PS4-1.
PS4.A	MS-PS4-2.
PS4.C	MS-PS4-3.
LS3.A	MS-LS3-1.
LS4.A	MS-LS4-1.
LS4.A	MS-LS4-2.
LS4.A	MS-LS4-3.
LS4.B	MS-LS4-4.
LS4.B	MS-LS4-5.
LS4.C	MS-LS4-6.
ESS1.A	MS-ESS1-1.
ESS1.A	MS-ESS1-2.
ESS1.B	MS-ESS1-3.
ESS1.C	MS-ESS1-4.
ESS3.C	MS-ESS3-4.

COURSE 3 Repeats

DCI	PE
PS3.C	MS-PS3-2.
PS4.B	MS-PS4-2.
LS3.B	MS-LS3-1.
ESS1.B	MS-ESS1-1.
ESS1.B	MS-ESS1-2.
ETS1.A	MS-ETS1-1.
ETS1.B	MS-ETS1-2.
ETS1.B	MS-ETS1-3.
ETS1.B	MS-ETS1-4.
ETS1.C	MS-ETS1-3.
ETS1.C	MS-ETS1-4.

Key to Highlighting

PE appears in two DCIs within the same course
PE is identified in the NGSS as a secondary connection to this component idea
PE is connected to two component ideas between two courses