

Summary of Instructional Analysis Ratings  
in Physical Science

## Textbook Series

## Instructional Categories

	<i>Glencoe Life, Earth, and Physical Science</i> Glencoe/McGraw-Hill	<i>Macmillan/McGraw-Hill Science</i> Macmillan/McGraw-Hill	<i>Middle School Science and Technology</i> Kendall/Hunt	<i>Prentice Hall Science</i> Prentice-Hall	<i>PRIME Science</i> Kendall/Hunt	<i>Science 2000</i> Decision Development Corp.	<i>Science Insights</i> Addison-Wesley	<i>Science Interactions</i> Glencoe/McGraw-Hill	<i>SciencePlus</i> Holt, Rinehart & Winston	<i>Matter and Molecules</i> Michigan State University
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## I. PROVIDING A SENSE OF PURPOSE

Conveying unit purpose	■	□	□	□	■	□	■	■	■	■
Conveying lesson purpose	□	□	□	■	■	□	■	■	□	□
Justifying activity sequence	■	■	□	■	□	□	■	■	□	□

## II. TAKING ACCOUNT OF STUDENT IDEAS

Attending to prerequisite knowledge and skills	■	■	■	■	□	■	■	■	■	□
Alerting teacher to commonly held student ideas	■	■	■	■	■	■	■	■	■	■
Assisting teacher in identifying own students' ideas	■	■	■	■	■	□	■	■	□	□
Addressing commonly held ideas	■	■	■	■	■	■	■	■	■	□

III. ENGAGING STUDENTS WITH RELEVANT  
PHENOMENA

Providing variety of phenomena	□	■	■	■	□	■	■	□	□	□
Providing vivid experiences	□	■	□	■	□	□	■	□	□	■

## IV. DEVELOPING AND USING SCIENTIFIC IDEAS

Introducing terms meaningfully	□	□	□	■	□	□	□	□	□	■
Representing ideas effectively	□	■	■	■	■	■	■	■	■	□
Demonstrating use of knowledge	□	■	■	■	■	■	■	■	■	■
Providing practice	□	■	■	■	□	■	■	□	□	□

V. PROMOTING STUDENT THINKING ABOUT  
PHENOMENA, EXPERIENCES, AND  
KNOWLEDGE

Encouraging students to explain their ideas	■	■	□	■	■	□	■	□	□	■
Guiding student interpretation and reasoning	□	■	□	■	■	□	■	■	□	■
Encouraging students to think about what they've learned	□	■	□	■	■	■	■	■	■	■

## VI. ASSESSING PROGRESS

Aligning assessment to goals	■	■	■	■	■	■	■	□	□	□
Testing for understanding	■	■	■	■	■	■	■	□	□	□
Using assessment to inform instruction	■	■	■	■	■	■	■	■	■	□

■ = Poor (0-1); □ = Fair (1.5); □ = Satisfactory (2); □ = Very Good (2.5); ■ = Excellent (3)