

GRADING SMARTER NOT HARDER

Assessment Strategies
That Motivate Kids
and Help Them Learn

MYRON DUECK

Foreword by Ken O'Connor

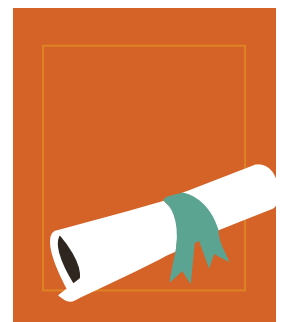


Figure 1.1
Effect of a Zero Score on the Final Average (Example 1)

Scores	Scores
78	78
71	71
74	0
68	68
81	81
Final Average	Final Average
74.4	59.6

Figure 1.2
Effect of a Zero Score on the Final Average (Example 2)

Successful Serves (Out of 10)
March 1: 0
March 2: 0
March 3: 0
March 4: 2
March 5: 3
March 8: 5
March 9: 7
March 10: 8
March 11: 8
March 12: 9
Average: 4.2/10

Figure 1.3
Late or Incomplete Assignment Form

Name: _____ Date: _____

Missing assignment: _____

Reason(s) for missing the due date:

- | | |
|---|--|
| <input type="checkbox"/> school-based sports/extracurricular | <input type="checkbox"/> heavy course load |
| <input type="checkbox"/> job/work requirements | <input type="checkbox"/> social event(s) |
| <input type="checkbox"/> difficulty with material/lack of understanding | <input type="checkbox"/> club or group event out of school |
| <input type="checkbox"/> procrastination | <input type="checkbox"/> other |

Details: _____

Revised completion date: _____

Interventions/support required:

- | | |
|--|--|
| <input type="checkbox"/> extra study/home-based effort | <input type="checkbox"/> use of planner |
| <input type="checkbox"/> homework club | <input type="checkbox"/> help with time management |
| <input type="checkbox"/> extra help from teacher | <input type="checkbox"/> counselor visit |
| <input type="checkbox"/> tutorial | <input type="checkbox"/> other |

Details: _____

Figure 1.4

Number of Course Failures Before, During, and After Implementation of "No Zeros" Policy and Additional Supports

Year	Term 1	Term 2	Term 3	Term 4	Final
2004–2005	292	334	321	300	192
2005–2006	215	272	265	291	118
2006–2007	160	198	193	248	104
2007–2008	5	33	40	53	36

Data compiled by Terry Grady.

Figure 2.1
Homework Planning Form

Name: _____ Class: _____

Section	Prescribed Learning Outcome	Topic	Homework Support <i>List all homework that will assist you in understanding the topic.</i>	Check Off If Complete
2.1	D1–D5	Dynamic Equilibrium		
2.2	D4, D6	Characteristics of Equilibrium		
2.3	D7–D9	Spontaneous or Non-spontaneous	Worksheet 2-1	
2.4	E1–E4	LCP (LeChatelier's Principle)		
2.5	E5	Haber Process	Worksheet 2-2	
2.6	F1–F3	Keq		
2.7	F4	LCP and Keq		
2.8	F5–F8	ICE tables	Worksheet 2-3	

Figure 2.2 Assessment Tracking Sheet

Name: _____ Class: _____

Use this form to keep track of your scores on quizzes and unit tests. Be sure to note the specific concepts that you need to review following a quiz or test.

Quiz/Test	Score	Concepts to Review
Sec 2.1–2.3		
Re-Quiz Sec 2.1–2.3		
Sec 2.4–2.5		
Re-Quiz Sec 2.4–2.5		
Sec 2.6–2.8		
Re-Quiz Sec 2.6–2.8		
Chapter 2 Test		
Chapter 2 Retest		

Figure 2.3

Homework-Completion Rates Versus Test Results: The 9 Categories

Category 1: Homework Good/Tests Good

Students who fall into this category generally have learned to do their homework well. They practice their skills at home and are therefore prepared for tests. These students need to continue doing what they're doing.

Category 2: Homework Good/Tests Satisfactory

Students who fall into this category generally try to do most of their homework but either don't ask for help on difficult questions or don't make connections to similar types of questions on tests. They often miss details, gloss over instructions, finish their tests hastily, and make simple mistakes, resulting in test scores that are lower than desired.

Category 3: Homework Good/Tests Poor

Students who fall into this category generally try to complete their homework because they know it needs to be done, but often must rely on notes, classmates, or the teacher to complete it. They tend not to go over the homework questions on their own to check for understanding. Some students do not check the answers against the textbook or answer key to make sure they are doing the work correctly. Students in this category are often very anxious about tests and find it hard to communicate what they know on paper. These students need to find a more efficient way to complete their homework while checking for understanding.

Category 4: Homework Satisfactory/Tests Good

Students who fall into this category generally do as much homework as they have time for in class, or do the work necessary to do well on a test. These students often do not have to practice a lot to learn the material well—they tend to learn easily and make connections without extra practice. Students in this category need to be aware that they are responsible for deciding how much homework practice they need to maintain high grades. Such a choice requires sophisticated reasoning.

Category 5: Homework Satisfactory/Tests Satisfactory

Students who fall into this category generally do as much homework as they have time for in class. Often, they do not answer the last few questions on a given assignment. When students cannot answer questions themselves, they often do not ask for help. These are usually the higher-level thinking questions, and students in this category tend not to answer those correctly on tests. For most students in this category, if they were to complete

their homework and ask for help, their test scores would probably improve.

Category 6: Homework Satisfactory/Tests Poor

As with Category 5, students who fall into this category generally do as much homework as they have time for in class, do not answer the last few questions on a given assignment, and tend not to ask for help. Some students answer all the questions but do not check for accuracy. Most students in this category need to apply more effort to answering more questions correctly. It is important for them to focus on what they do and do not know and to ask for help whenever they need it.

Category 7: Homework Poor/Tests Good

Students who fall into this category generally only work on their assignments in class. Their work is often scattered, lost, or completed at random. These students often learn easily and need very little practice; they draw connections during classroom lessons. They often make wise choices about whether or not homework practice will benefit their understanding. Some students do not use class time wisely and are lucky to catch on easily. Students in this category who wish to improve their homework grades need to focus on the details of the concepts being taught.

Category 8: Homework Poor/Tests Satisfactory

Students who fall into this category generally do not use class time wisely to complete their work. They often do not like to take work home, and stop when they get frustrated. Many of them are fine with a satisfactory result, as they are not willing to put forth extra effort. If these students were to complete more of their homework, their test scores would improve. Effort is the key.

Category 9: Homework Poor/Tests Poor

Students who fall into this category generally do not use class time wisely, do not have a habit of completing work, and do not make connections quickly. These are normally the students who need to focus more in class and ask questions about every assignment. More effort and more daily quality work would start to improve their grades and give them added confidence. These students need extra help to make connections every day; they are often students who have struggled throughout their time in school and who have gaps in their background knowledge. Sometimes outside factors contribute to their poor grades. These factors need to be addressed so that students can better concentrate on their work.

Figure 2.4 In-School Suspension (ISS) Form

Please fill in all of the applicable fields following the enactment of an In-School Suspension (ISS). Be sure to indicate who has received this e-mail using the last table on this form.

Student name:	
Dates of suspension:	
Grade:	
Administrator in charge of suspension:	
Location of ISS	
	Room 118 Learning Center (Ms. Smith)
	Room 127 Learning Center (Mr. Lennon)
	Room 133 Junior Alternative (Ms. Sanchez)
	Room 210 Senior Alternative (Mr. Anders)
	Room 300 Counseling
	Main Office Area
	Other:
E-Mail Checklist	
	ISS Distribution List: Administrators, counselors, lunch monitor, ISS teacher(s), clerical staff
	Ms. Tracey (youth worker)
	Mr. Sloan (drug and alcohol intervention)
	All classroom teachers of the ISS student

Thank you for your support,

The ISS Team

Source: Courtesy Doug Scotchburn. Used with permission.

Figure 3.1 Factors and Multiples Unit Plan

Name: _____ Teacher: _____

Will breaking a number into factors help me solve a problem? What do factors and multiples of numbers tell me about a situation?

Knowledge Targets <i>"What do I need to know?"</i>	1. I can explain the difference between a factor and a multiple.
	2. I can identify factors of a positive integer. 6.1E
	3. I can identify common factors and the greatest common factor (GCF) of two or more positive integers. 6.1E
	4. I can identify multiples of a positive integer. 6.1F
	5. I can identify common multiples and the least common multiple (LCM) of two or more positive integers. 6.1F
	6. I can identify a set of positive integers. 6.1F
Skill Targets <i>"What can I demonstrate?"</i>	7. I can solve real-life problems that require using LCM or GCF.
	8. I can use multiplication of whole numbers to solve problems including situations involving equivalent ratios and rates. 6.2C
	9. I can use division of whole numbers to solve problems including situations involving equivalent ratios and rates. 6.2C

Every composite number has a unique "fingerprint"—an expression as a product of prime numbers unique only to that number, regardless of order of the factors.

What is my academic goal for this unit?

Summative Assessments:

1 Just starting, Insufficient	2 Yes, but . . . , Minimal	3 Yes, Proficient	4 WOW! Excellent
Less than 60% accurate	Between 60 and 74% accurate	Between 75 and 89% accurate	90% or greater
Not able to explain math process or explain key math points	Able to show process, but not able to identify/explain key math points	Able to both explain process and identify/explain key math points	Able to explain key math points accurately in a variety of problems

(cont.)

Figure 3.1 CONTINUED
Factors and Multiples Unit Plan

Learning Target	Assignment	Target/Goal	Your Rubric Score	Met Standard/Target?

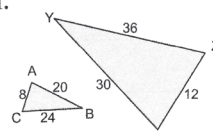
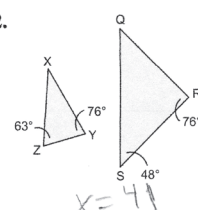
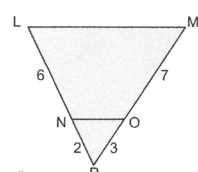
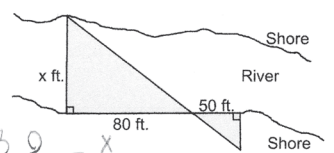
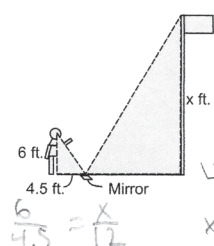
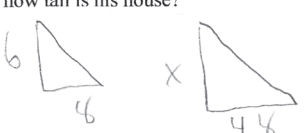
factor common factor greatest common factor (GCF) prime number composite number
 multiple common multiple least common multiple (LCM) prime factorization factor pair

Source: Karl Koehler, Atascocita Middle School, Humble, Texas. Used with permission.

Figure 3.2
Sample Interactive Unit Plan

CHS Geometry 2011-2012
U4 Student Expert Review

Name Austin
Date _____

Targets & Problems	Answers	Expert Initials
<p>U4A2: I can write ratios and solve proportions.</p> <p>1. Edan has a triangular tree house. The measures of the angles of a triangle are in the extended ratio 6:1:5. What is the measure of the largest angle?</p> <p> $6x + 1x + 5x = 180$ $12x = 18$ $x = 15$ $6(15) = 90$ </p> <p> $2. \frac{3}{5} = \frac{x}{25}$ $75 = x$ $x = 15$ </p> <p> $3. \frac{x-2}{8} = \frac{3}{4}$ $4x - 8 = 24$ $4x = 32$ $x = 7$ </p>	<p>1. $x = 90$</p> <p>2. $x = 15$</p> <p>3. $x = 8$</p>	<p>Ciara</p> <p>Eli</p> <p>Emma</p>
<p>U4A3: I can use AA, SAS, and SSS to prove triangles are similar.</p> <p>Are the triangles similar? If so, tell which postulate you used to prove it.</p> <p>1.  $\frac{8}{12} = \frac{20}{30} = \frac{24}{36}$ </p> <p>2.  $x = 48$ </p> <p>3.  $\frac{2}{10} = \frac{3}{8}$ </p>	<p>1. SSS</p> <p>2. No</p> <p>3. No</p>	<p>Eli</p> <p>Emma</p> <p>Ciara</p>
<p>U4A4: I can use similar triangles to find indirect measurements.</p> <p>1.  $\frac{30}{50} = \frac{x}{80}$ $50x = 2400$ $x = 48$ </p> <p>2.  $\frac{6}{4.5} = \frac{x}{7.5}$ $4x = 72$ $x = 16$ </p> <p>3. At 5:30 P.M. Ezra stands next to his house and measures his shadow and the house's shadow. Ezra's shadow is 8 ft long. The house's shadow is 48 ft long. If Ezra is 6 ft tall, how tall is his house?</p> <p>  $\frac{6}{8} = \frac{x}{48}$ $\frac{8x = 256}{8}$ $x = 36$ </p>	<p>1. $x = 48$</p> <p>2. $x = 16$</p> <p>3. $x = 36$</p>	<p>Emma</p> <p>Ciara</p> <p>Eli</p> <p>Teacher Initials: CB</p>

Source: Courtesy Chris Bradley. Used with permission.

Figure 4.1
Sample Tracking Sheet for Test

Name: Jon Black Date: April 3, 2010

Topic	Value	Score	%	Retest? (✓)
The United States in the 1920s	11	8	73%	
Causes of the Depression	4	1	25%	
Roosevelt's efforts to end the Depression	5	1	20%	
Reactions to Roosevelt's New Deal	7	7	100%	
The end of the Depression	6	4	67%	
Total	33	23	70%	

Total points: 23 out of 33 Overall test score: 70%

UNIT TERMS:

- I DID complete all of the terms for this unit on either cards or sheets.
- I did NOT complete either the cards or the term list for this unit.

Reason: I didn't think I needed to; I felt prepared.

PREPARATION:

What **overall grade** (percentage or letter) am I hoping to achieve in this course? 85%

- I did all that I could to achieve my goal in preparing for this test.
- I can make the following adjustments to increase my grade:

✓ complete all vocabulary cards

✓ make a practice quiz to test myself

✓ _____

Figure 4.2

Student Feedback on Retesting

5. Did it make a difference to you knowing that you could rewrite sections where you did not do so well? yes no

Explain

because its easier than doing the whole test

5. Did it make a difference to you knowing that you could rewrite sections where you did not do so well? yes no

Explain

I Did really bad on the essay and would like to rewrite it probably

5. Did it make a difference to you knowing that you could rewrite sections where you did not do so well? yes no

Explain

That if you do bad on one section you can't redo it so I felt more confident

Figure 5.1 Project Planning Sheet

Name: _____ Date: _____

Focus: _____ Medium/Delivery: _____

<i>What I am learning . . .</i>	<i>How I will show I have learned it . . .</i>	
Learning Outcome	Medium/Method	Details and/or Elements Covered
<input type="checkbox"/> Compare the nature of democratic and totalitarian states & their impact on individuals.		
<input type="checkbox"/> Explain the rise to power of Hitler and National Socialism with reference to <input type="checkbox"/> conditions that generated support for Nazism. <input type="checkbox"/> Hitler's actions and policies.		
<input type="checkbox"/> Identify the causes of the outbreak of World War II in Europe and the Pacific.		
<input type="checkbox"/> Explain the significance of key military events in World War II, including <input type="checkbox"/> BATTLE OF BRITAIN. <input type="checkbox"/> attack on PEARL HARBOR. <input type="checkbox"/> EL ALAMEIN. <input type="checkbox"/> BATTLE OF MIDWAY. <input type="checkbox"/> BATTLE OF STALINGRAD. <input type="checkbox"/> NORMANDY LANDINGS. <input type="checkbox"/> bombing of HIROSHIMA.		
<input type="checkbox"/> Explain how World War II resulted in a realignment of world power.		
<input type="checkbox"/> Describe the impact of "total war."		
<input type="checkbox"/> Describe the significance of technology developed prior to and during World War II.		
<input type="checkbox"/> Assess the impact of mass communications on political and military events prior to and during World War II.		
<input type="checkbox"/> Evaluate the historical significance of the HOLOCAUST.		

Figure 5.2
Analytic Rubric for Creativity

	Very Creative	Creative	Ordinary/Routine	Imitative
Depth and Quality of Ideas	Ideas represent a startling variety of important concepts from different contexts or disciplines.	Ideas represent important concepts from different contexts or disciplines.	Ideas represent important concepts from the same or similar contexts or disciplines.	Ideas do not represent important concepts.
Variety of Sources	Created product draws on a wide-ranging variety of sources, including different texts, media, resource persons, and/or personal experiences.	Created product draws on a variety of sources, including different texts, media, resource persons, and/or personal experiences.	Created product draws on a limited set of sources and media.	Created product draws on only one source, and/or sources are not trustworthy or appropriate.
Organization and Combination of Ideas	Ideas are combined in original and surprising ways to solve a problem, address an issue, or make something new.	Ideas are combined in original ways to solve a problem, address an issue, or make something new.	Ideas are combined in ways that are derived from the thinking of others (for example, of the authors in sources consulted).	Ideas are copied or restated from the source(s) consulted.
Originality of Contribution	Created product is interesting, new, and/or helpful, making an original contribution that includes identifying a previously unknown problem, issue, or purpose.	Created product is interesting, new, and/or helpful, making an original contribution for its intended purpose (e.g., solving a problem or addressing an issue).	Created product serves its intended purpose (e.g., solving a problem or addressing an issue).	Created product does not serve its intended purpose (e.g., solving a problem or addressing an issue).

Source: From *How to Create and Use Rubrics for Formative Assessment*, by S. M. Brookhart, 2013, Alexandria, VA: ASCD. Copyright 2013 by ASCD. Reprinted with permission.

Figure 5.3 World War I Test Feedback Sheet

Name: _____

1. Did you feel prepared for yesterday's test? yes no

2. Did you study outside of class time for yesterday's test? yes no

How long? _____

3. What was your overall feeling during the test yesterday?

4. Are there parts or sections where you felt more confident than others? yes no

Explain:

5. Did it make a difference to you knowing that you could rewrite sections where you did not do so well? yes no

Explain:

6. Rank the following test formats from your most enjoyable (1) to least enjoyable (5):

_____ multiple choice

_____ written

_____ diagram/drawing

_____ spoken/oral

_____ essay/paragraph

Explain your reasons for your ranking:

7. If you were given a chance to show your knowledge and understanding in a different way (a project, video, game, test of your own design, etc.), would you prefer that? yes no

Explain:

Figure 5.4
Test Feedback Sheet

Test: _____ Name: _____

1. Did you feel **prepared** for yesterday's test? yes no

2. Did you study outside of class time for yesterday's test? yes no
 Approximately how long did you study? _____ min hours

3. Describe how you felt during the test yesterday:

 <input type="checkbox"/> confident <input type="checkbox"/> knowledgeable <input type="checkbox"/> calm <input type="checkbox"/> in total control	 <input type="checkbox"/> okay <input type="checkbox"/> knew some stuff <input type="checkbox"/> a little nervous <input type="checkbox"/> sketchy	 <input type="checkbox"/> stressed <input type="checkbox"/> my mind was blank <input type="checkbox"/> rushed <input type="checkbox"/> scattered
--	--	--

4. Are there parts or sections where you felt more confident than others? yes no

 Felt confident <input type="checkbox"/> multiple choice <input type="checkbox"/> definitions <input type="checkbox"/> short answer <input type="checkbox"/> diagram <input type="checkbox"/> long answer (planning section) <input type="checkbox"/> long answer (written section)	 Did NOT feel confident <input type="checkbox"/> multiple choice <input type="checkbox"/> definitions <input type="checkbox"/> short answer <input type="checkbox"/> diagram <input type="checkbox"/> long answer (planning section) <input type="checkbox"/> long answer (written section)
---	---

5. Did it make a difference to you knowing that you could rewrite sections where you did not do so well? yes no
 Explain: _____

6. Rank the following test formats from **most enjoyable (1)** to **least enjoyable (5)**:

_____ multiple choice	Explain your reasons for your ranking: _____ _____ _____ _____
_____ written	
_____ diagram/drawing	
_____ spoken/oral	
_____ essay/paragraph	

7. If you were given a chance to show your knowledge and understanding in a different way (a project, video, game, test of your own design, etc.), would you prefer that? yes no

PLEASE USE THE BACK OF THIS FORM IF YOU NEED TO EXPLAIN ANY RESPONSES

Figure 5.5 Oral Response Form

Date: _____ Name: _____

spoken only (not recorded) recorded video recorded audio

Location of media file: _____

Question:				
Rating of examples used in the context of the question.				Question value: _____
Excellent	Good	Adequate	Not in Context/ Incorrect	Key Element/Detail
Total:	Total:	Total:	Total:	Value awarded: _____
Comments:				

Figure 5.6 Multiple-Choice Response Sheet

Name: _____

Write the letter that corresponds to the correct answer in the first space provided below. If you are unsure of your answer, write the letter that represents your second choice in the second blank. SUGGESTION: Select no more than five "second choices" or you may run out of time.

- | | | |
|---------------|---------------|--------------------|
| 1. ____ ____ | 11. ____ ____ | 21. ____ ____ |
| 2. ____ ____ | 12. ____ ____ | 22. ____ ____ |
| 3. ____ ____ | 13. ____ ____ | 23. ____ ____ |
| 4. ____ ____ | 14. ____ ____ | 24. ____ ____ |
| 5. ____ ____ | 15. ____ ____ | 25. ____ ____ |
| 6. ____ ____ | 16. ____ ____ | 26. ____ ____ |
| 7. ____ ____ | 17. ____ ____ | 27. ____ ____ |
| 8. ____ ____ | 18. ____ ____ | 28. ____ ____ |
| 9. ____ ____ | 19. ____ ____ | |
| 10. ____ ____ | 20. ____ ____ | TOTAL: ____ |

On the lines below, provide some information that explains why you are unsure of the correct response.

____ . _____

____ . _____

____ . _____

____ . _____

____ . _____

____ . _____

Figure 5.7 Supplemental Multiple-Choice Response Form

Please include this sheet with your multiple-choice response form. If the original multiple-choice responses were completed digitally or online, check this box:

Name: _____ Date: _____ Test: _____

For each question below, indicate the two responses you are considering by shading in the corresponding boxes. You must use the **explanation area** to describe why you are struggling to determine the correct response. Share why you might consider both responses to be correct. Make an effort to demonstrate your understanding of the concept. You may use a combination of words and diagrams.

Question: _____ Responses to consider: A B C D

Explanation Area:

If I had to select ONE response only, I would choose _____.

Question: _____ Responses to consider: A B C D

Explanation Area:

If I had to select ONE response only, I would choose _____.

Figure 5.8

Sample Student Explanation to Math Question Using the I Know I Am Close Format

Solve the following problem: $6 + 3 \times 4 - 2$

- A. 0
- B. 16
- C. 18
- D. 34

Responses to consider: A B C D

Explanation Area:

I think that the correct answer is 16 because I multiply the 3 and 4 and I get 12. Then I add the 6 and I get 18. Then the question is $18 - 2$ and that equals 16.

What I find confusing is that I was studying with Marie yesterday and she said that we just read it like a book from left to right. If I did that, I would do this:

$$6 + 3 = 9 \text{ then } 9 \times 4 = 36 \text{ then } 36 - 2 = 34$$

But I think the answer really is 16.

If I had to select ONE response only, I would choose letter B.

Figure 5.9 Sample Question Using Twitter Format

1. Create a Twitter conversation (four tweets) between two of the earth's spheres. (4 points)
2. The spheres are to discuss the effect of deforestation on their sphere.
3. Each sphere needs a handle, and you must include one hashtag that relates to the conversation.

@troposphere123: how's the oxygen & CO2 today? #atrisk

@biosphere: fine, but running out of forest #atrisk #gettingwarmer

@troposphere123: 2 much deforestation #atrisk #gettingwarmer #actsoon

@biosphere: need to selectively log, reforest, cut back on cars #atrisk #gettingwarmer #timerunningout

Figure 5.10 Sample Assignment Incorporating Digital Photos

In groups of two or three, use an iPad or phone to take pictures and label examples of each of the following terms. The same picture can be used for multiple terms.

The terms are worth different points. The group with the most points at the end of class will win a yummy glass of iced tea.

If you have the same picture of a term as another group, both teams will fail to get points for that term. So . . . NO SHARING.

The terms will be discussed and the text questions will be completed during the next class.

Sec 3.1

Read pages 41 to 48 for the definitions.

Define:

Qualitative	(2 points)	Quantitative	(2 points)
Observation	(1 point)	Interpretation	(5 points)
Description	(1 point)	Data	(1 point)
Experiment	(2 points)	Hypothesis	(15 points)
Theory	(15 points)	Law	(5 points)

Complete questions #1–6 on page 43.

Sec 3.2

Define:

Matter	(1 point)	Substance	(1 point)
Physical Property	(5 points)	Chemical Property	(10 points)
Intensive Property	(10 points)	Extensive Property	(5 points)

Complete questions #13 and 15 on page 45.

What are the three common states of matter? List the set of properties of each.

Name four exotic states of matter (2 million points each).

Define:

Hardness	(2 points)	Malleability	(2 points)
Ductile	(2 points)	Luster	(2 points)
Viscosity	(2 points)	Diffusion	(2 points)
Vapor	(10 points)	Vapor Pressure	(10 points)

Complete questions #21, 22, 24, and 25 on page 48.

Source: Courtesy Ben Arcuri. Reprinted with permission.