

Critical Thinking

Grades 11 and 12, Lesson #1

Time Needed

One class period.

NOTE: Although this is the “first” lesson in this curriculum supplement, it is crucial that it be preceded by a climate-setting lesson or two, such as those at the beginning of the **9/10 FLASH** curriculum.

Student Learning Objectives

To be able to...

1. Define and recognize a statement about values.
2. Define and recognize a statement about feelings.
3. Define and recognize gross fallacies (stereotypes, overgeneralizations, etc.).
4. Distinguish among facts, fallacies, feelings and values.

Agenda

1. Explain the relevance and purpose of the lesson.
2. Use the *Critical Thinking Reference Sheet* or a “mini lecture” to introduce the key concepts.
3. Use *Critical Thinking Exercise One* and the *Critical Thinking Transparency* to rehearse the skill of distinguishing among facts, fallacies, values and feelings.
4. Use *Critical Thinking Exercise Two* (group interaction, movement) to reinforce the skill.

Materials Needed

One per student of ...

Critical Thinking Reference Sheet *

Critical Thinking Exercise One

One copy of ...

Critical Thinking Transparency **

One class set of ...

Critical Thinking Exercise Two: Gamecards (either copy the cards on ordinary paper and then tape each one to an index card for durability, or copy onto card stock to begin with)

SIGNS posted in the four corners of the classroom, in *block letters*, 'FACT', "FEELING," "FALLACY," and "VALUE"

* *Copying the Reference Sheet is optional. It can be used either as a handout, or simply as lecture notes, for your convenience.*

** Alternately, beginning in late 2006, all FLASH transparencies will be available as PowerPoint files on the FLASH web site: www.metrokc.gov/health/famplan/flash

Activities

1. Explain the lesson's purpose and relevance:

We are going to examine some very sensitive issues over the next few weeks ... issues like AIDS, abortion, homosexuality. There will be difference of opinion, a variety of emotions, and disputes about what is accurate. It will be especially important to follow the ground rules we have established. It will be important, also, for everyone to be able to tell the difference among values, feelings, facts and fallacies. (Point to the signs in the four corners of the room, as you say these.) We are going to spend the next hour making sure everyone knows the difference. That way, at least we can be honest and clear in our disagreements.

2. Define and give examples of the four key concepts (fact, feeling, value and fallacy). There are two ways to do this:
 - a. Hand out **Critical Thinking Reference Sheet**. Give the class time to read it and then discuss. It is written at a particularly high reading level and contains some sophisticated concepts.
 - b. Alternately, simply use the **Critical Thinking Reference Sheet** as "lecture notes". Explain the four key concepts, citing examples from the **Critical Thinking Reference Sheet**.

Jot key words from the definitions on the **Critical Thinking Transparency**. For example:

FEELING: emotion, sensation

VALUE: belief, opinion, morals, right/wrong, should/shouldn't

FACT: provable, accurate, research, experts, theories

FALLACY: misconception, stereotype, generalization, "line"

Elicit from the class a couple of examples of each of the four concepts, besides those on the **Critical Thinking Reference Sheet**.

3. Hand out **Critical Thinking Exercise One**. Complete the first side aloud, as a large group. Then have students complete side two individually. Allow them about four minutes. Keep the **Critical Thinking Transparency** on the screen, as a "crib sheet".

Correct **Critical Thinking Exercise One** aloud, having volunteers answer each item and justify their decisions.

Thus, if a student thinks a particular statement is a **FEELING** or **VALUE**, ask him or her which word or phrase shows this. So in number one ("Julio is self-conscious around girls, especially ones he likes."), the words "self-conscious" and "likes" are the operative ones that show it is a feeling statement. Have people circle the words "self-conscious" and "likes" on their papers.

If a student thinks a particular statement is a **FACT**, ask her or him where one might go to verify it. The encyclopedia? a medical journal? a school health text?

If the student considers something a **FALLACY**, is the statement a “line” used to manipulate? a stereotype? an oversimplification? an illogical conclusion? Is it a superstition? Where could they verify that it is untrue?

The correct answers, as far as we’re concerned, are...

- 1) **FEELING** ... operative words: **self-conscious, likes**
- 2) **FACT** ... possible sources to verify: health text, doctor, school nurse
- 3) **FALLACY** ... possible sources to verify: doctor (especially a gynecologist), Facts of Life Line, (Seattle area)
- 4) **FEELING** ... operative words: **liked**
- 5) **FEELING** ... operative words: **satisfying and relaxing** or, also correct, **FALLACY about a feeling** ... overgeneralization, oversimplification ... possible sources to verify: anyone who’s been in a loving, committed relationship could tell you that sex is sometimes great and sometimes “just OK”
- 6) **VALUE** ... operative words: **inappropriate**
- 7) **VALUE** ... operative words: **should**
- 8) **FEELING** ... operative words: **bother**
- 9) **VALUE** ... operative words: **wrong**
- 10) **FACT** ... possible sources to verify: text, medical journal, family planning clinic
- 11) **VALUE** ... operative phrase: **more important than**
- 12) **FALLACY** ... possible sources to verify: medical journal, doctor (especially dermatologist)

You can even accept answers different from those above, if the student offering the answer can articulate his/her reasoning well enough. The exercise is not meant to be graded, though you may want to collect it as proof of participation (on a credit/no-credit basis).

4. Reinforce the concepts using **Critical Thinking Exercise Two**. Give instructions as follows:

*Notice again the signs, I’ve posted in each corner of the room: “**FACT**,” “**FEELING**,” “**FALLACY**,” and “**VALUE**.” I am going to give each of you a **Gamecard** with a sentence on it. When you get your **Gamecard**, you will go to the corner you think is appropriate for your **Gamecard**. Remember that, for the sake of this exercise, a fact about a feeling counts as a feeling, and a fact about a value counts as a value. Your job today, is simply **to understand these four categories** (point to the signs), **NOT to debate individual opinions or beliefs on the issue**. There will be time on other days to discuss the issues.*

Hand out the **Gamecards**, randomly. Give students a minute or so to get to their corners. Give the next instruction:

Now, show your card to the others in your corner, discuss it, and get agreement from the others that you are in the correct corner. You can change corners, if the others convince you that you were mistaken, but don’t just let them outvote you. Stand your ground, if you think

your card really belongs in the corner you chose.

Have each person read his or her **Gamecard** aloud and explain why he or she is in that particular corner. Those with facts (or fallacies) can explain where they could go to get proof.

We think the answers are:

1-5 = **VALUES**
6-10 = **FEELINGS**

11-15 = **FALLACIES**
16-20 = **FACTS**

21-25 = **VALUES**
26-30 = **FEELINGS**

Critical Thinking Reference Sheet



For our purposes, a **FACT** will be defined as: a *provable, accurate statement based on scientific, medical, legal, sociological or psychological research or the opinions of “most” experts in a field.*

Hypotheses and theories can count if they are identified as such. Facts can be confirmed by credible sources (ideally, scholarly journals ... but other sources without obvious biases count, too.)

Examples:

1. I think you can get pregnant even if you use the Pill.
2. Carmen said that most child molesters know their victims personally.
3. A woman usually releases about one egg per month.
4. On average, girls start puberty younger than boys.



For our purposes, a **FALLACY** will be defined as: a *misconception, stereotype or other overgeneralization, oversimplification, illogical conclusion, or other untrue statement.*

Myths and superstitions count, as do “lines” used to coerce, sell, con or manipulate.

Examples:

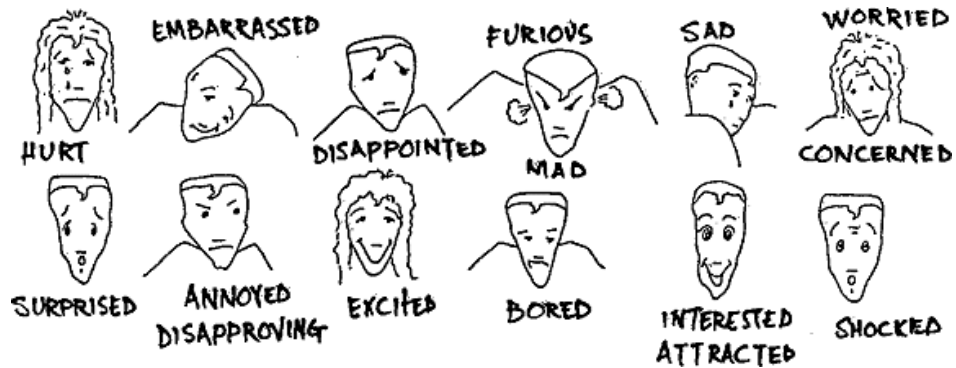
5. If a woman doesn't bleed on her wedding night, she wasn't a virgin.
6. I think people who get crushes on people of their same sex are gay.
7. Chris said if I loved him, I would (have intercourse).
8. This toothpaste will make you sexy and help you attract gorgeous people.



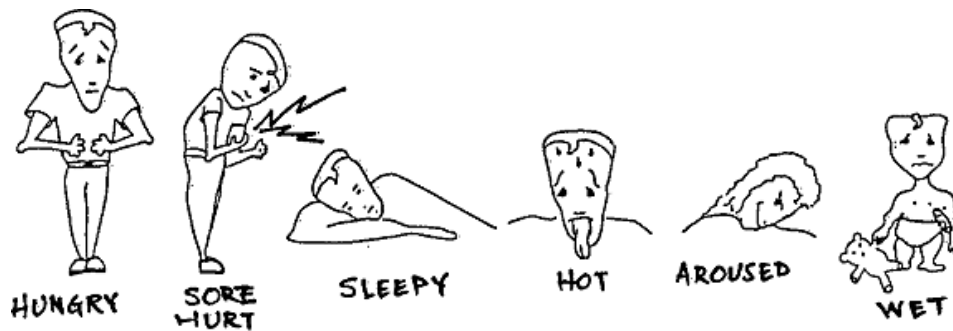
For our purposes, a **FEELING** will be defined as: an emotion or sensation.

They are often stated in the first or third person (as in "I'm angry about ..." or "Many people get turned on when ..."), although not always (as in, "Birth control foam is yucky!")

Emotions include:



Sensations include:



People also sometimes say they feel: beautiful, fat, competent, juvenile, sexy, fragile, used

Examples:

9. Lena gets turned on when she kisses Sean.
10. I get sad thinking of all the babies lost through abortions.
11. It's awkward talking about sex in a classroom setting.
12. I have an itch down there.



For our purposes, a **VALUE** will be defined as: a *belief or opinion about the morals or ethics of an issue ... about right and wrong, good and bad, relative importance or what one should or shouldn't do.*

They make sense when preceded by the phrase, "Some people believe..." or the phrase, "In my opinion ...". Sometimes, values are religious in nature. Sometimes the words "healthy" and "normal" are used in value statement, to imply that something is acceptable or appropriate.

Examples:

13. I think it's stupid to "do it" without a rubber.
14. Many people believe it isn't right to have sex for money.
15. Masturbation is a healthy, positive outlet for teens' sexual feelings.
16. Prostitution is exploitive.
17. You shouldn't be attracted to another person's partner (husband, wife, boyfriend, girlfriend, etc.).

NOTE: For our purposes

A fact about a feeling counts as a feeling. (See number 12, on the previous page.)

A fact about a value counts as a value. (See number 14, above.)

A value about a feeling counts as a value. (See number 17, above.)

ALSO: Remember, just because you happen to agree with a value statement, that doesn't make it a fact. Even a universally held value — one that everyone agrees with — is a value.

Critical Thinking Exercise One

NAME _____ DATE _____ PERIOD _____

Part One

DIRECTIONS: In the blank after each statement below, write whether it is a FACT, FALLACY, FEELING or VALUE.



Guys may get embarrassed when they have erections in public.



Most people in our culture think you should shower or bathe more often after puberty.



If you 'just say no' to chocolate, you won't get acne.



A girl can get pregnant as soon as she releases an egg, even if she has never had a period yet.

Part Two

DIRECTIONS: For each statement, write ...

“**FACT**” if it is a true, factual statement ... one that could be proven, or about which most experts would agree.

“**FALLACY**” if it is a myth, stereotype, illogical conclusion, “line”.

“**VALUE**” if it is about a moral opinion (right, wrong, good, better, best, bad, worst, etc.).

“**FEELING**” if it is about an emotion (happy, worried) or a sensation (tired, thirsty).

NOTE: For our purposes ... A fact about a feeling counts as a feeling. (e.g., “I have an itch down there.”) A fact about a value counts as a value. (e.g., “Many people believe it isn’t right to have sex for money.”)

_____ 1.	Julio is self-conscious around girls, especially ones he likes.
_____ 2.	Hanh told me girls bleed on their periods.
_____ 3.	I heard you can’t get pregnant the first time you have sex.
_____ 4.	I heard Tammy liked Andrew.
_____ 5.	Sex with someone you love is satisfying and relaxing.
_____ 6.	It’s inappropriate to masturbate in public.
_____ 7.	I was taught that men should never let anyone push them around, even if it means having to fight.
_____ 8.	Having a pelvic exam doesn’t bother me.
_____ 9.	It’s wrong to have an abortion, unless your life is in danger.
_____ 10.	Birth control pills are made of hormones.
_____ 11.	The quality of a couple’s relationship is more important in their decision about sex, than whether they are married.
_____ 12.	Acne is mainly caused by greasy foods in the diet.

Critical Thinking Transparency

Feeling

Value

Fact

Fallacy

Critical Thinking Exercise Two: Gamecards



1. Real men open doors for women.	9. My Mom hates it when Dad tries to help her with her coat; it seems to her that he's saying she's a helpless child.
2. I think a woman should pay her own way on a date.	10. Some men get hurt when they act like gentlemen and women ignore it.
3. My sister says its wrong to expect guys to take all the risks; she thinks a girl should sometimes ask a guy out.	11. Women can't do jobs that take real strength, like driving eighteen wheel trucks.
4. If a guy pays for a girl's dinner and her ticket to a movie, he has a right to expect sex.	12. Men are clumsy with babies.
5. Nobody ever has a right to expect sex; it isn't something people should bargain for.	13. Only gay men would want to be nurses.
6. I get angry when I see a man walk right in to a building with out holding the door for a woman.	14. Women athletes are usually lesbians.
7. It's frustrating doing the same job as a man and getting paid less just because you are female.	15. If a girl wears a certain kind of clothes, everyone knows she is an easy lay.
8. Katy likes it when Tony helps her on with her coat; it makes her feel feminine.	16. It is illegal to discriminate against women in hiring.



<p>17. On average, men have a higher proportion of muscle than women.</p>	<p>24. It's only right to open the door for some one, male or female, if your hands are free and he or she is carrying things.</p>
<p>18. Only women can breastfeed babies.</p>	<p>25. It is important for a man to work outside the home; he's a wimp if he lets a woman support him.</p>
<p>19. Some men stay home and take care of the children while their wives work.</p>	<p>26. Charlie enjoys staying home with the baby while his wife works.</p>
<p>20. The average salary for women is lower than it is for men.</p>	<p>27. I was furious after I paid all that money and she wouldn't even kiss me goodnight.</p>
<p>21. Most people believe that men and women should be paid the same salary for the same job.</p>	<p>28. I wanted to kill him, when he started acting like I owed him a kiss.</p>
<p>22. I wouldn't vote for a woman for president, because she'd be too soft to declare war.</p>	<p>29. She makes me sick, threatening to break up if I don't do what she wants.</p>
<p>23. You don't have to stay at home to be a good mother.</p>	<p>30. My grandfather loves to open doors for women; it makes him feel like a real man.</p>