A Beautiful Mind

(Drama/Biography) (2001) © 2002 by Raymond Weschler

Major Characters

John Nash	Russell Crowe
	atest mathematical geniuses of the 20 th century, who
won the Nobel	Prize in 1994, studied and taught at Princeton
University, and	d suffered from the mental disease of schizophrenia
for most of his	adult life (See note on schizophrenia below).
Alicia	JenniferConnelly
John's beautifu	ıl, intelligent and loving wife who stayed with him
through decad	es of marriage, from the 1950s to after 2000, despite the
difficulties of l	iving with a person with severe mental illness.
Parcher	
An agent of th	e US government who convinces John to help break
secret Soviet co	odes, in order to prevent a horrible nuclear attack on the
United States (Note: Parcher is not really who he appears to be).
Charles	PaulBettany
John's roomma	ate at Princeton who studied English literature
(Note: Like Par	rcher, John is not really who he appears to be).
Martin Hansen	JoshLucas
A brilliant mat	h student at Princeton and colleague of John's
who later beco	mes head of the Princeton math department.
Dr. Rosen	
A psychiatrist	in Boston who identifies John's Schizophrenia
and helps him	and Alicia to live with the disease.

Plot Summary

This film is the true story of John Nash, one of the great geniuses of the 20th century, who was famous for both his theories in math, and for the fact that he suffered from schizophrenia. The movie follows Nash's amazing life from the time he arrives at Princeton University as a young, brilliant and noticeably odd West Virginia math student, until his life as an old man who has won the Nobel Prize. Over the years, he becomes recognized as a unique intellect whose theories have greatly influenced not only mathematics, but various other academic areas from economics to biology. And as of this writing in 2002, Nash is still alive, and still teaches at Princeton.

The focus of this movie is on Nash's struggle with the terrible illness of schizophrenia, which began to effect him while a student at Princeton in the early 1950s. Afterward, his brilliance led to a teaching and research position at the prestigious Massachusetts Institute of Technology (MIT), the world famous university in Boston. There, Nash's disease began to grow worse, but fortunately for him, it was also at MIT that he met Alicia, a brilliant math student of her own. The two fell in love, and while Alicia did not discover his illness until after they married, once she realized how sick her husband was, she did all she could to take care of him, herself, and their new son.

With great determination, John Nash was able to successfully fight back from the delusions that are a large part of schizophrenia, and while he never was able to get rid of the disease completely, he became an honored member of the Princeton community. In some ways, his life is a truly fascinating window on the still unclear relationship between genius and madness.

<u>A Brief Note on Schizophrenia</u>: Many people used to think that schizophrenia was a mental disease marked by "split personality," which exists when one person seems to have two or more completely different personalities. In fact, most people who have this mental illness do not have that condition, but they do suffer from such things as inability to think clearly, manage emotions, make decisions, or relate to others. Most seriously, schizophrenics can suffer from hallucinations ("seeing things that don't really exist"), as well as a fundamental and unpleasant change in how they experience basic emotions, incoming sensations and even themselves. In short, this is a terrible illness that can take away a person's ability to lead a normal life, though fortunately, it has become more and more treatable.

<u>A Brief Note on the Language of Advanced Mathematics</u>: Throughout the film, there is frequent reference to many of the abstract mathematical theories that John Nash and his colleagues were working on, including in such specific areas as "equilibrium points, manifold embedding, Brouwer's fixed point theorem, Riemann's functional equation hypothesis" and other bizarre topics that only the most sophisticated mathematicians could truly understand. In general, the glossary below chooses to ignore most of that language, since it is probably not worth your time as ESL students. Regardless, and like most people, I don't what most of it means!....

A Brief Note on Princeton and MIT:

Most of the film centers around John's life at two of the best Universities in the United States. Princeton is located in the small town of Princeton, New Jersey, about an hour from New York City. When John arrived as a young student in the late 1940's, Albert Einstein was still a professor there (He died in 1955, having been at Princeton for nearly 20 years).

The Massachusetts Institute of Technology, known by most as MIT, is perhaps the most prestigious school of technology and applied sciences in the world (In the film, John taught for a few years at a defense department center at MIT called the Wheeler Institute). MIT is located just minutes from Harvard University, in Boston, Massachusetts, which probably has more excellent universities than any city in the world.

Some Words and Expressions that You May not Know

John Nash arrives at Princeton, meets his lesser genius classmates, and his curious roommate Charles.

Mathematicians broke the Japanese <u>codes</u>....and built the <u>A-bomb</u>. A "code" is a secret set of symbols that only certain people can understand. The "A-bomb" is short for an atomic or nuclear bomb.

The stated goal of the Soviets is global communism.

If a goal is "stated," it is officially announced. After World War 2, many in the Western Capitalist countries feared that the Soviet Union would try to take over the world by spreading their form of communism.

To triumph, we need results. Publishable, applicable results.

"To triumph" is to beat an opponent. If results are "publishable," they are good enough to be printed in academic or scholarly journals, and if they are "applicable," they have a practical use.

Who among you will be the next Morse, Einstein....

the vanguard of democracy, freedom and discovery?

Morse was famous for having invented the "Morse code," which was a series of short sounds by which messages were sent through wire in the 19th century. The "vanguard" of a social movement are the first people who promote it, before it becomes popular.

Today, we <u>bequeath</u> America's future into your able hands. To "bequeath" property is to hand it legally down to the next generation, often in the form of a will.

It's not enough that he won the Carnegie <u>scholarship</u>. A "scholarship" is a gift of money that is given to allow people to study at a university or other educational institution. It's the first time the Carnegie Prize has been <u>split</u> and Hansen is all <u>bent</u>. If a prize is "split," it is divided between two or more people (If a person is "bent out of shape," they are angry or upset; "Bent" alone, which means twisted or curved, is no longer used for angry).

Nielson, symbol cryptography.

The study of codes and how to break them so they can be understood.

Neil here broke a Jap code; Help <u>rid the world of</u> fascism. "Jap" is now considered a racist word for Japanese, though it was common up through the 1960s. "To rid the world" of something is to help eliminate it ("Get rid of" is more common).

The <u>burden</u> of genius.....so many <u>supplicants</u> and so little time. A "burden" is a great responsibility or problem that is carried. A "supplicant" is a person who has or begs with humility or respect.

Nice is not Hansen's strong suit.

A person's "strong suit" is the skill that they are good at (A funny way of saying that Hansen doesn't know how to be nice).

I imagine you're getting quite used to <u>miscalculation</u>.

A "miscalculation" is a mistake in solving a math or other problem.

I've read your <u>pre-prints</u> on <u>nazi ciphers</u> and <u>non-linear equations</u>...
 A "pre-print" is a dated academic term for a paper before it has been published. "Nazi ciphers" were German code writers during World War 2. A "non-liner equation" is a concept in advanced mathematics.

...and I am supremely confident that there is not a single <u>seminal</u> or <u>innovative</u> idea in either one of them.

If an idea is "seminal," it's important and original. If an idea is "innovative," it's a new way of thinking that has not been done before.

Enjoy your <u>punch</u>.

A popular fruit drink at parties, which often contains alcohol.

The prodigal roommate arrives!

An educated word for a person who spends and wastes lots of money, and who was often spoiled as a child.

Did you know that having a <u>hangover</u> is not having enough water in your body? It's not enough to run your <u>kreb cycles</u>.

> A "hangover" is the horrible feeling people have the morning after they have drunk too much alcohol. A "kreb cycle" is a term for energy storage that is used in biology.

I got in time for English Department <u>cocktails</u>.

An iced alcoholic drink that is popular at parties.

The <u>cock</u> was mine and the <u>tail</u> belonged to a particularly <u>lovely</u> young thing with a <u>passion for</u> DH Lawrence.

A "cock" is a crude word for a penis, and in this case a tail refers to a woman's ass. "Lovely" is a British word for pretty or attractive. If you have a "passion for" somebody, you are very attracted by or interested in them (DH Lawrence is a well know British writer of the early 1900s).

You are not easily <u>distracted</u>, are you?

If a person is "distracted," they can't concentrate on what they want to because something else is bothering them or has gotten their attention.

Is my roommate a <u>dick</u>?

A funny adjective for a jerk, idiot or in certain contexts, a penis.

You the poor kid who never got to go to Exeter or Andover? ::

Despite my <u>privileged upbringing</u>, I'm actually quite well-balanced. Exeter and Andover are two famous preparatory schools in Massachusetts that the children of the rich attend in order to get into the best universities. If a person has had a "privileged upbringing," they've been raised in great wealth, often with an excellent education.

I have a <u>chip on both shoulders</u>.

If a person has "a chip on their shoulder," they are bitter or angry about something that happened to them in the past.

Maybe you're better with <u>integers</u> than you are with people. An "integer" is a mathematical word for a number.

Why? With all your obvious <u>wit</u> and <u>charm</u>.

A person's "wit" is their ability to be funny. A person's "charm" is the quality about them that attracts, interests and delights other people.

I can't waste time....memorizing the weak assumptions of <u>lesser mortals</u>. "Lesser mortals" is a funny but snobby way of referring to people that the speaker feels are not as intelligent as they are.

I need to look through...to the governing dynamics.

That's the only way I'll ever <u>distinguish myself</u>.

"Governing dynamics" is John's way of referring to the basic rules that control a system or situation. "To distinguish" yourself is to accomplish something so important you become very well known. I've played enough <u>Go</u> for one day. :: <u>Come on</u>, I hate this game. "Go" is a famous board game from East Asia. "Come on" is the most

versatile phrasal verb in English, here meaning please, or "be serious."

I'm hoping to <u>extract</u> an <u>algorithm</u> to define their movement. "To extract" is to remove or pull out forcefully. An "algorithm" is a step by step process for solving a mathematical problem.

Ok....psycho.

A popular slang word for a person who is crazy.

- I thought you <u>dropped out</u>. Ever going to go to class? "To drop out" of school is to quit, or to decide to no longer go.
- Classes will <u>dull</u> your mind and destroy the potential for <u>authentic creativity</u>. "To dull" a person's mind is to make them less intelligent or creative. If something is "authentic," it is genuine or true, and "creativity" is the ability to think, create or make things in new and different ways.
- Nash is going to <u>stun</u> us all with his genius. "To stun" a person is to shock or overwhelm them.

He doesn't have <u>the nerve</u> to compete.

If a person doesn't have "the nerve" to do something, they don't have the courage to do it.

Terrified, <u>mortified</u>..<u>stupefied</u>, by you.

If a person is "mortified," they are scared to death. If they are "stupefied," they are so confused that they feel stupid.

No starch, pressed and folded.

"Starch" is a powder used with clothes to make them flat or stiff, and if clothes are "pressed," they are ironed to be flat without wrinkles.

Adequate work...without innovation. :: I'm flattered.

If work is "adequate," it is satisfactory, but it is not that good. "Innovation" is anything that's truly new or original. If a person is "flattered," they feel good after having been complimented.

I've got two <u>weapons</u> <u>briefs</u> <u>under security</u>

<u>review</u> by the <u>D.O.D</u>. :: <u>Derivative</u> <u>drivel</u>.

A "weapon" is a type of arm, from a gun to a tank. A "brief" is a short paper, and if it is under "security review," it is being read to see if it needs to be kept secret. The "D.O.D." is the Department of Defense. If a paper is "derivative," its ideas were taken from elsewhere and it is not original. "Drivel" refers to words that are nonsense or make no sense. What if you never <u>come up</u> with your original idea? "To come up" with an idea is to think of it or create it.

How will it feel when I'm chosen for <u>Wheeler</u> and you're not? In this film, Wheeler is the name of a Defense Department institute at the Massachusetts Institute of Technology (MIT) where many very smart people would love to work.

The <u>hubris</u> of the defeated. :: The game is <u>flawed</u>. "Hubris" is too much self-confidence or ego. If something is "flawed," it is imperfect or has a built-in mistake or problem.

> John's awkward moments with women triggers a major breakthrough in mathematics, game theory and economics.

Hanson's just published another paper and I can't even find a <u>topic</u> for my <u>doctorate</u>.

A "topic" is a subject and a "doctorate" is a major paper or thesis that is written for a Ph.D. degree.

This is a <u>cluster</u> of <u>pigeons</u> fighting over bread crumbs.

A "cluster" is a group of the same things that are close together (houses, birds, etc). A "pigeon" is a horrible type of common bird.

John, you watched a <u>mugging</u>. :: In competitive behavior, someone always loses.

A "mugging" is the act of one person physically attacking another, often in order to steal their money. Behavior that is "competitive" is done to beat another person, usually in a game, or in the market place.

If I could <u>derive</u> an <u>equilibrium</u> where <u>prevalence</u>

is a non-singular event, where nobody loses....

This is John's mathematical talk. "To derive" is to take or obtain from a specific source. "Equilibrium" is balance or equality between two sides, and "prevalence" is frequency

....can you imagine the effect that would have on <u>conflict</u> <u>scenarios</u> and <u>arms negotiations</u>? On <u>currency exchange</u>?...

A "conflict" is a war or contest between two sides, and a "scenario" is any future possibility. "Arms negotiations" refers to the act of trying to limit the number of weapons that each side has. "Currency exchange" refers to the value of money in terms of the money of another country (dollars, pounds, francs, etc) You have no respect for <u>cognitive reverie</u>, you know that?

"Cognitive" refers to the mind or intellect, and "reverie" is the act of daydreaming or thinking intently about something.

Fortune favors the brave! Bombs away!

The first sentence is a way of saying those with courage will get what they want. The second sentence is slangy way of saying that it's time to take a risk and try (in this case, to try and meet a pretty girl).

My <u>odds</u> of success dramatically improve with each event. "Odds" is another word for chances or possibility.

This is going to be <u>classic</u>.

If something is "classic," it will be remembered for a very long time.

I don't know exactly what I'm <u>required</u> to say in order for you to have <u>intercourse</u> with me, but could we assume I've said all that?

"To require" a person to do something is to force or oblige them to do it. "Intercourse" is a very formal word for sex (i.e....sexual intercourse).

<u>Essentially</u>, we're talking about <u>fluid exchange</u>,

right? :: Have a nice night, <u>asshole</u>!

"Essentially" is another word for basically. In this context, "fluid exchange" refers to the bodily fluids (semen, vaginal fluids) that come into contact during sex. "Asshole" is a very strong insult word for jerk, bastard, creep, etc.

It's very <u>clever</u>, but I'm afraid it's not good enough.

An important word meaning intelligent, skillful or ingenious.

I've been working on manifold embedding....my bargaining strategies are starting to <u>show some promise</u>.

If a scientific theory "shows promise," it has been shown to have great potential in the future.

If you could just <u>arrange</u> another meeting with Professor Einstein? "To arrange" a meeting is to organize it or make it happen.

What do you see, John? :: <u>Recognition</u>.

"Recognition" is the act of recognizing or acknowledging a person for the things that they have accomplished.

John, you haven't focused!

"To focus" on a problem is to concentrate on it, without getting distracted by other things. Up to this point, your record doesn't <u>warrant</u> any placement at all.

"To warrant" is another way of saying to deserve or merit

(In this case, a placement or assignment at a research institution).

Jesus Christ, John.

A common way to express emotion such as surprise or anger.

I can't keep staring into space!

"To stare" at something is to look at it intently, without turning away.

Don't mess around!

"To mess around" is to waste time or not take something seriously.

Bust that worthless head wide open!

"To bust open" something is to violently break or shatter it. If something is "worthless," it has no value.

Goddamn it, Charles! What the hell is your problem?

"Goddamn it" is a crude way of expressing anger. "The hell" is added to WH questions to express emotion such as anger or frustration.

That Isaac Newton fellow was right! He was <u>on to</u> something. If a person is "on to" something, they are in the process of discovering or realizing something of great value or importance.

Nash, you might want to stop <u>shuffling</u> your papers for 5 seconds. "To shuffle" papers is to continue passing them form one hand to the other, often because of nervousness.

Shall we say <u>swords</u>, gentlemen? <u>Pistols</u> at dawn? A "sword" is a weapon with a long blade for cutting, and a "pistol" is a type of gun. This is the way people in the 1700s would speak when proposing a duel or battle between two people.

<u>Recall</u> the lessons of Adam Smith, father of modern economics. "To recall" something is to remember it.

"In competition, individual <u>ambition</u> serves the common good." "Ambition" is the desire to achieve a goal. This was Adam's Smith way of saying the capitalist system worked well for society as a whole even though individuals only try to help themselves.

And those who <u>strike out</u> are stuck with their friends. "To strike out" is to fail doing something (To strike out in baseball is to fail to hit the ball).

You can lead a blond to water but you can't make her drink. The original expression is "You can lead a *horse* to water..."

He may <u>have the upper hand</u> now, but wait until he opens his mouth. If a person has "the upper hand," they have the competitive advantage against others.

Adam Smith needs <u>revision</u>. A "revision" is a change or modification of a writing or idea.

They will all <u>give us the cold shoulder</u>

because nobody likes to be second choice. To give a person "the cold shoulder" is to coldly reject their social, romantic or sexual advances or proposals.

That's the only way we all get laid.

To "get laid" is a slangy and very common way of saying to have sex, usually with a person you are not married to.

If this is some way for you to get the blond on your own, you can <u>go to hell</u>. "Go to hell" is a crude but softer insult than "fuck you."

You do realize that this <u>flies in the face of</u> 150 years of economic theory? If a scientific theory "flies in the face" of another one, it completely contradicts or goes against the other one.

That's rather **presumptuous**, don't you think?

A good word which means to presume too much, often in a arrogant or overly confident way, or to overstep appropriate boundaries

Mr. Nash, with a breakthrough of this magnitude,

I'm confident you will get any placement you like.

A "breakthrough" is a major advance in science, and "magnitude" is another word for size, strength or intensity.

Sol and Bender are <u>extraordinary</u> mathematicians.

A very useful adjective meaning exceptional, or perhaps substantially better or more distinguished than almost everyone else.

Has it <u>occurred to you</u> that Sol and Bender might have plans of their own? If something "occurs to you," it means that you suddenly think of it, without others bringing it to your attention.

OK, awkward moment, gentlemen.

Another useful word meaning socially uncomfortable or embarrassing.

John joins the government in the fight against Soviet terror, and begins his troubled life as a professor at MIT.

General, the <u>analyst</u> from Wheeler Labs is here. An "analyst" is a researcher, scientist or person who studies or analyzes complicated data or information.

We've been <u>intercepting radio transmissions</u> from Moscow. "To intercept" a message is to secretly get access to it in order to listen to it or read it. "Radio transmissions" are messages sent through the air.

The computer can't <u>detect</u> it, but I'm sure it's a code. "To detect" something is to see, recognize or understand it.

We've developed several <u>ciphers</u>, if you'd like to review our <u>preliminary</u> <u>data</u>.

A "cipher" is a type of secret code. "Preliminary" means initial or first, and "data" refers to any kind of statistics or countable information.

These are longitudes and latitudes.

The first is the distance West or East from Greenwich, England, and the second is the distance North or South of the equator.

They appear to be <u>routing</u> orders across the border into the US. "To rout" an object is to send it to a particular destination.

Gentlemen, we need <u>to move on</u> this.

"To move on" something is to take action on it.

Who's <u>big brother</u>?

An expression from the book "1984" that refers to a government agent that spies on people to make sure that they are following orders.

Captain Rogers will escort you to the <u>unrestricted</u> area, doctor.

"To escort" a person is to accompany them, often to provide protection or company. If an area is "unrestricted," anybody is allowed to go there.

Home run at the <u>Pentagon</u>? :: Have they <u>actually</u>

taken the word "classified" out of the dictionary?

A "home run" is a term from baseball that means the hitting of a ball out of the ballpark, but it more generally means a great success. Note that "actually" often means, as here, truly. If something is "classified," it's kept secret from all except a very few people who need to know. Our hearts go out to you, John.

One way of expressing sympathy to someone after something very bad has happened to them.

We just got our latest scintillating assignment.

If something is "scintillating," it is extremely interesting or intellectually stimulating or lively. An "assignment" is a particular project, task or job.

The Russians have the <u>H-bomb</u>, the nazis are <u>repatriating</u>

South America, the Chinese have a standing army of 2.8 million... The "H-bomb" is a hydrogen bomb, which is a powerful nuclear weapon. "To repatriate" an area is to fill it with people.

.... and I'm doing stress tests on a dam.

A "stress test" is designed to see how much pressure a building can take before it's damaged. A "dam" is a giant structure for holding water.

So not only do they rob me of the <u>Fields Medal</u>, they put me on the cover of Fortune Magazine with these hacks, these scholars of trivia...

The Fields medal is a very prestigious prize awarded for work in math. A "hack" is a writer who claims to be doing serious work, but is only writing for commercial success. A "scholar" is a serious researcher, and "trivia" refers to unimportant facts or details.

Come on, you know <u>the drill</u>. You get these beautiful <u>facilities</u> and MIT gets America's great minds of today teaching America's great minds of tomorrow. In this case, "the drill" is the routine things that a person is expected to do over and over. A "facility" is a building that is used for a special purpose, such as a hospital or school.

The <u>eager</u> young minds of tomorrow.

If a person is "eager," they have impatient desire or interest.

You may complete your assignments at your whim.

To do something "at your whim" is to do it whenever you want (A person's whim is a sudden or unplanned desire).

<u>I was wondering if</u> there was any way you could

work some place else for about 45 minutes.

This is an excellent way to gently ask a person something that might be awkward or embarrassing (including to ask someone on a date).

For others among you, it will take you <u>the term of your natural lives</u>. A formal way of saying "as long as you live." Impressive work at the <u>Pentagon</u>. :: Yes, it was.

If something is "impressive," it has the power to make a lasting impression, or to excite or attract. "The Pentagon" is the huge five sided building that houses the US military headquarters.

We <u>incinerated</u> 150,000 people in a heartbeat.

"To incinerate" something is to burn it to ashes.

Great <u>deeds</u> come at great cost.

A "deed" is a formal word for an action that is done.

<u>Conviction</u>, it turns out, is the luxury of those on the <u>sidelines</u>. Here, "conviction" is strong belief in a principle or idea. The "sidelines" refers to the side of a field where players stand and watch the game. This is Parcher's way of saying those who are directly involved in war cannot always be true to their beliefs.

I like to think it's because I'm <u>a lone wolf</u>. A person who likes to be alone.

There are certain <u>endeavors</u> where your <u>lack of</u> personal connections would be considered an advantage.

An "endeavor" is a serious or determined effort to accomplish something. A "lack of" something is a shortage or absence of it.

We were told during our initial meeting that these <u>warehouses</u> were <u>abandoned</u>.

A "warehouse" is a large building, often used for storing lots of stuff. If a building is "abandoned," it is no longer occupied by people.

I'm increasing your <u>security clearance</u> to <u>top secret</u>. <u>Disclosure</u> of secure information can result in imprisonment. <u>Get it</u>?

A "security clearance" is official approval to see secret documents that a government or organization wants kept secret. If something is "top secret," it can only be seen by an extremely few people. "Disclosure" is the act of revealing something secret or unknown to others. "Get it?" is a very common way of asking a person if they understand.

A <u>faction</u> of the <u>Red Army</u>....has control of the bomb, and intends to detonate it on US soil.

A "faction" is a small part or group from a bigger whole.

The "Red Army" refers to the army of the old Soviet Union.

"To detonate" a bomb is to explode it, and "soil" is another word for ground or territory. The plan is to incur maximum civilian casualties.

"To incur" is a formal word meaning to cause, or bring down on oneself. "Civilian casualties" are deaths among people who are not part of the military.

Man is capable of as much <u>atrocity</u> as he has imagination. An atrocity is anything that is extremely cruel or brutal.

New Freedom has <u>sleeper agents</u> here in the US. "Sleeper agents" are spies or terrorists who quietly live in a country and blend in with the population, but who may eventually strike violently ("New Freedom" is the name of a Soviet spy military group).

<u>McCarthy</u> is an <u>idiot</u>, but unfortunately, that doesn't make him wrong. Joseph McCarthy was a famous anti-Communist Senator of the 1950s. An "idiot" is a stupid, ignorant or uneducated person.

New Freedom communicates to its agents through code <u>embedded</u> in newspapers and magazines...and that's where you come in.

If a code is "embedded" in newspapers, it is hidden deep within the articles of the paper (To embed is to place within). "That's where you come in" is a way of saying "and this is why you are involved."

What <u>distinguishes</u> you, is that you are, quite

simply, the best natural code breaker I've ever seen.

"To distinguish" a person is to set them apart from others, often because of their exceptional talents. A "code breaker" is a person who can understand how a code works in order to understand the messages within it.

<u>Commit</u> this list of periodicals <u>to memory</u>, <u>scan</u> each new issue, find any hidden codes, decipher them.

"Commit to memory" is a way of saying to memorize. "To scan" something is to read it or go over it very quickly in order to find the most important parts. "To decipher" a code is to find out how it works in order to understand the messages within it.

Pulse 88, regular.

A person's "pulse" is the regular beating measured in their arteries (for example, just below their hands), which is caused by the heartbeat.

That's got a little <u>zap</u> to it, doesn't it? He just <u>implanted</u> a <u>radio diode</u>. A "zap" is a sudden burst of energy. "To implant" something is to place it inside, in this case inside John's arm. A "radio diode" is a type of device used to send messages through the air. The <u>isotope decays periodically</u>. As a result, these numbers change over time. An "isotope" is a type of atom, to "decay" is to fall apart or crumble, and "periodically" means occasionally over time.

They're the <u>access codes</u> to your <u>drop spot</u>.

An "access code' is a secret series of numbers or letters for opening a locked door, box or other container. A "drop spot" is a secret place where a person is supposed to drop off or leave something.

Alicia comes into John's life, and soon the genius is married.

Your solution is <u>elegant</u>, though on

this particular occasion, <u>ultimately</u> incorrect.

"Elegant" means graceful or dignified, and "ultimately" is a common way of saying in the end.

Table for one, Prometheus alone chained to the rock,

with the bird circling overhead. You know how it is.

Prometheus is a famous character in Greek mythology who was known for being chained to a rock, as John describes above.

You and the <u>Governor</u>.

A "governor" is the political head of the 50 individual US states.

Practice <u>human interaction</u> and <u>social comportment</u>. :: <u>That's a plan</u>. Both "human interaction" and "social comportment" are fancy ways of saying to be social or friendly with other people. "That's a plan" is a common way of saying a plan of action is responsible or a good idea.

I don't believe in luck. But I do believe in <u>assigning value</u> to things. "To assign" a value to something is to state or assume that it has a specific worth, such as a number like 100, or a monetary value like \$5.

You are exceptionally odd.

"Exceptionally" is a strong adverb meaning very or extremely. "Odd" is a useful little adjective meaning strange or bizarre.

I find that <u>polishing</u> my <u>interactions</u> in order to make them sociable requires a tremendous effort.

"To polish" a skill is to refine it or improve it. An "interaction" is the act of communicating with another person. "Sociable" means friendly or comfortable with others, though social is much more common. "Tremendous" means with great intensity or strength.

I have a <u>tendency to expedite</u> information flow by <u>being direct</u>.

A "tendency" to do something is a general likelihood that you will do it. "To expedite" something is to make it go faster.

I find you attractive. Your aggressive moves

toward me indicate you feel the same way.

"Attractive' is a useful word for pretty, handsome or pleasant. In this case, "aggressive moves" are direct ways of suggesting to a person that you like them.

But still, <u>ritual</u> requires us to continue with a

number of <u>platonic</u> activities before we have sex.

A "ritual" is any kind of ceremony or custom, which usually dates back for many generations or longer (such as going on several dates before having sex).

I am <u>proceeding</u> with those activities, but in point of actual fact, all I really want to do is have <u>intercourse</u> with you as soon as possible.

"To proceed" with something is to continue doing it. "Intercourse" is a very official way of referring to sex.

Are you gonna slap me now?

Note that "going to"----> "gonna" in rapid speech. "To slap" a person is to hit them with an open hand.

I'm attempting to <u>isolate patterned reoccurrences</u> with <u>periodicals</u> over time... "To isolate" something is to separate it from other things. "Patterned reoccurrences" is John's way of referring to patterns that repeat themselves. "Periodicals" are magazines, like Newsweek and Time.

I shouldn't <u>pay no mind</u> if you're mean to me.

"To pay no mind" to another person is to not pay attention to them (though note that this expression is a bit old-fashioned).

I took her in.

If you "take in" a person, you allow them to live with you and often you agree to take care of them.

I'm at Harvard, doing the great author's <u>workshop</u>. DH <u>bloody</u> Lawrence. A "workshop" is a class or seminar on a particular topic. "Bloody" is a British adjective which expresses emotion such as anger or excitement.

At first all my work here was <u>trivial</u>, but a new

assignment came up....I can't really tell you any details.

If something is "trivial," it is unimportant or of little value. An "assignment" is a particular job or task that needs to be done. Top secret? Black bag? Black ops?

Expressions for a very secret job or assignment.

A human girl? <u>Homosapian</u>? A <u>biped</u>? "Homosapian" is a very scientific term for a human being, and a "biped" is any animal with two feet.

Contrary to all probabilities, she finds me attractive on a number of different levels.

"Although it seems impossible, she likes me in many different ways."

That's wonderful. :: <u>There's no accounting for taste</u>, is there? An interesting expression which means that one can never really know what people will and will not like.

The job is fine. I have enough money. :: <u>It all seems to add up</u>. In this case, "it all seems to add up" is a way of saying that when everything is viewed together, it all makes sense.

I <u>lost track of time</u> at work.

A common way saying you no longer have any idea what time it is.

I didn't have time to <u>wrap</u> it. Happy birthday. "To wrap" a present is to cover it in paper or other protective material.

Alicia, does our relationship <u>warrant long-term commitment</u>? I need some kind of proof, some kind of <u>verifiable</u>, <u>empirical data</u>. "To warrant" something is to deserve or merit it. A "long-term commitment" between two people is the decision to stay together as a couple for a long or indefinite period. If something is "verifiable," it can be shown to be true, and "empirical data" is data or information that can be tested or observed through scientific means.

Give me a moment to redefine my <u>girlish</u> <u>notions</u> of romance. In this context, "girlish" means young and inexperienced. A person's "notions" are general ideas or beliefs.

All the data *indicate* the universe is *infinite*.

"To indicate" something is to suggest or reveal it. If something is "infinite," it goes on forever and has no end.

Alicia discovers that John is a very sick and troubled man, but sets out to do whatever she can to help him. The drop's been <u>compromised</u>. Get down!

If a secret plan has been "compromised," it has been put in danger because other people have found out about it.

Every time a car <u>backfires</u> or a door <u>slams</u>....

If a car "backfires," it makes a sudden and loud noise from the fuel tank. If you "slam" a door, you shut it with great force or violence.

We're <u>closing in on</u> the bomb, in large part <u>due to</u> your work. "To close in on" something is to get closer to finding exactly where it is. "Due to" is another way of saying thanks to.

William, my <u>circumstance</u> has changed.

Another word for situation, but usually it is used in the plural ("My circumstances have changed since I saw you last").

I told you <u>attachments</u> were dangerous. You chose to marry the girl. In this case, an "attachment" is an emotional attraction or bonding with another person.

I saw you on the <u>slate</u> and I thought to myself "How can I miss seeing a great <u>lecture</u> by the <u>inimitable</u> John Nash?"

A "slate" is a list of people who are due to perform or speak. A "lecture" is a speech usually given before a class in order to teach or instruct. "Inimitable" is an excellent adjective meaning unique or beyond comparison.

Sometimes our expectations are <u>betrayed</u> by the numbers...

<u>variables</u> are impossible to <u>assign</u> any rational value.

If your expectations are "betrayed," they are disappointed or denied. A "variable" is a number than can vary or change, depending on other factors. "To assign" a value to something is to officially give it a value.

Let's avoid <u>a scene</u>, shall we?

"A scene" is usually a loud and angry argument that is awkward or embarrassing if other people see it.

I'm a <u>psychiatrist</u>. :: Forgive me if I don't seem <u>persuaded</u>.

A "psychiatrist" is a medical doctor who also treats people with mental or psychological problems. "To persuade" a person is to convince them.

I'd like you to come with me, just for a <u>chat</u>.

A "chat" is a short, casual or informal conversation.

<u>Thorazine</u> takes a little while to <u>wear off</u>.

"Thorazine" is a drug that is used to stop pain, but it can also make you tired. When a drug "wears off," it grows weaker in effect until it no longer is present or effects the body.

Sorry about the restraints. You got one hell of a right hook.

A "restraint" is a rope or strap which is placed around a person to prevent them from moving. In this context, "hell of a" is a slangy expression that means very powerful. Here, a "right hook" is the act of punching like a boxer, in this case with the right fist.

The prodigal roommate revealed.

A "prodigal" person is spoiled with wealth and material objects. If something is "revealed," it is shown to others.

I'm being held against my will!

If a person is "held against their will," they are being physically prevented from leaving even though they want to.

- John has schizophrenia. People with this <u>disorder</u> are often <u>paranoid</u>. A "disorder" is another word for a disease or medical condition. If a person is "paranoid," they are convinced other people are trying to kill or harm them.
- He deals with conspiracies...

A "conspiracy" is a crime that is committed by two or more people who are working secretly together.

As such, his <u>illness</u> may have gone untreated for longer than is typical. Another word for disease.

Possibly since <u>graduate school</u>. At least that's when his hallucinations seem to have begun.

"Graduate school" is for older students who wish to study for advanced degrees such as a Ph.D. A "hallucination" is a fantasy in the mind that people mistakenly think is real, often caused by certain drugs.

Which is more likely? Your husband, a mathematician with no military training, is <u>fleeing</u> the Russians, or that he has <u>lost his grip on reality</u>?

"To flee" is to run away from someone who is chasing you. If you "lose your grip on reality," you are no longer able to tell what is real from what is fantasy.

John's always been a little <u>weird</u>. He said he was doing code-breaking. An excellent word meaning strange, odd, or bizarre. Directives come down all the time that some of us aren't cleared for.

A "directive" is an official order or instruction, and if a person is not "cleared for" it, they do not have the security clearance which allows them to receive it.

Lately, he became so much more <u>agitated</u>...

If a person is "agitated," they are disturbed, easily angered or upset.

I realize that my inability to discuss the

situation with you must have appeared <u>insane</u>...

A very common word for crazy.

There may be microphones...

A device for sending sound through the air, or in this case, a tiny device used to spy on others by secretly listening to what is being said.

It's breaking with protocol, but you need to know.

"Protocol" is a code of correct or appropriate behavior for particular situations or institutions, in this case, for government workers (To break with protocol is to act in a way that's considered inappropriate).

There's a threat that exists of catastrophic proportions.

If there is a threat "of catastrophic proportions," it could cause a catastrophe, or a total disaster with unthinkable death and destruction.

I think the Russians feel that my profile is too high;

That's why they just don't **<u>do away with</u>** me.

In this case, a person's "profile" is their fame or recognition in the general public. "To do away with" a person is to eliminate, get rid of, or even kill them.

Dr Rosen, code red, observation room 2.

In this case, a way of identifying an emergency situation to workers in the hospital where John is staying.

Administering insulin.

"To administer" a drug is to inject it into the patient's body. "Insulin" is a hormone that controls blood sugar.

John accepts he is sick, and decides to attack it with reason.

John always <u>spoke so fondly</u> of being here at Princeton. "To speak fondly" of a person or place is to speak about them with great affection or warmth. So Alicia, how are you holding up?

If a person is "holding up" well in a difficult situation, they are surviving or continuing to do ok.

The <u>delusions</u> have passed....with medication and a low-stress environment... A "delusion" is a psychotic belief about something that is not true in reality (A person may have a delusion that they are Jesus).

Often what I feel is obligation, or guilt over wanting to leave. <u>Rage</u> against John, against God. "Rage" is extreme or violent anger.

He's <u>transformed</u> into someone I love. "To transform" is to change from one thing or type to another.

There's no point in being <u>**nuts</u>** if you can't have a little fun. If a person is "nuts," they are crazy. Colloquial and common.</u>

Squeamish?

An excellent word to describe a person who is easily made nervous or sick by the sight of such things as blood, needles, snakes, etc...

<u>Alas</u>, I'm stuck with me. An interesting and old word that is used to express sadness or concern.

I'm trying to solve the Reimann <u>hypothesis</u>. An important word in science for an educated guess or theory.

I <u>figured</u> if I <u>dazzled</u> them, they would have to <u>reinstate</u> me. "To figure" is a common way of saying to think, and "to dazzle" a person is to totally impress them with some amazing talent. "To reinstate" an employee is to put them back in their job or position after they had been fired.

It's difficult with the <u>medications</u> because it's hard to see the solutions. Another word for medicine or drugs.

You should go easy. There are other things besides work. "You should try to relax."

Life, John. Activities available. Just add meaning. This is Charles' way of telling John that he should go out and have fun and experience life outside the world of advanced math. I can get three hours of overtime.

Hours that are paid better than normal because they are more than the usual 40 hours that most people are expected to work each week.

The bomb is in its final position here in the US....knowing your situation requires you <u>keep a low profile</u>, Mohammed. If a person "keeps a low profile," they stay quiet and don't do anything that will bring attention to themselves.

We've narrowed the bomb's location to somewhere on <u>the Eastern</u> <u>Seaboard</u>, but we haven't been able to <u>pinpoint</u> its exact <u>position</u>.

"The Eastern Seaboard" refers to US states on the Atlantic ocean. "To pinpoint" something is to locate it with great accuracy or precision. In this case, "position" is another word for location.

Rosen, that <u>quack</u>! Schizophrenic <u>break from reality</u>, right?

A "quack" is a person who pretends to be a doctor or scientist but in fact knows little and says a lot of nonsense. If a person has a "break from reality," they temporarily can't understand what is real and what is not.

Psychological bullshit!

A crude but excellent and widely used word that means lies, half-truths or more generally, nonsense.

Do you think we list our <u>personnel</u>? The people who work for a particular business or organization .

John, I'm sorry you had <u>to go through</u> all of this.

"To go through" something is to experience it over time (Usually it's something that was very difficult).

I can <u>restore</u> your <u>status</u> at Wheeler.

"To restore" something is to make it exactly like it was before. In this case, a person's "status" is their official title or position.

I'm just gonna grab the laundry. :: I'll draw his bath.

"To grab" something is to quickly or forcefully take it. "To draw" a bath is a very old-fashioned way of saying to fill it with water.

He's been <u>injected</u> with a <u>cloaking serum</u>. I can see him because of a chemical that was released into my bloodstream when my <u>implant dissolved</u>.

"To inject" a medicine is to place it into the body with a needle. "To cloak" is to hide, and a "serum" is a medicine or drug, but a "cloaking serum" probably does not really exist! An "implant" is something placed or hidden in a body, and if something "dissolves," it disappears or crumbles into tiny parts. You take care of her, you <u>pathetic</u> <u>piece of shit</u>....or I'll take care of you! "Pathetic" is a powerful adjective meaning so bad it's pitiful. A "piece of shit" is, of course, a very insulting way to refer to a person (Note here that "I'll take care of you" is a threat to hurt or kill).

Charles and Marcee cannot <u>coexist</u> with Alicia. If two people "coexist," they live in the same general time and place.

We'll need to start you on <u>a higher</u>

run of insulin shocks and new medication.

A way of saying a stronger or more intense quantity or dose. "Insulin" is a hormone that is used to control blood sugar.

Schizophrenia is <u>degenerative</u>. Some days may be symptom-free, but over time you're getting worse.

If a disease is "degenerative," it get worse over time.

You can't <u>come up with</u> a <u>formula</u> to

change the way you experience the world.

"To come up with" something is to create or think of it.

A "formula" is a rule or principle used in math (a = b+c).

You can't reason your way out of this.

"To reason" is to use logic, in this case to escape the problem.

I can <u>work it out</u>. All I need is time.

"To work out" a problem is to solve it.

He has commitment papers for me to sign.

In this case, a legal document that a wife signs which allows a judge to commit or force a mentally ill person into a mental hospital.

Give me some time and I will try to <u>figure this out</u>. "To figure out" a problem is to solve it.

I need to believe something <u>extraordinary</u> is possible. A powerful adjective meaning well beyond the usual or normal (It often implies extremely talented, powerful or amazing).

John and Alicia return to life at Princeton.

Come.

Today, few say this. When you hear a knock at the door, say come in.

My savior complex takes on a completely different form.

A psychological term for a person who is convinced that they are obligated to save the world, or at least various people in it (A savior is a person who saves others, and a complex is a psychological term for a person who has illusions of their own importance or role in society).

Tell him you're work is critical!

A good word for extremely important.

Is there any chance you could ignore what I just did? :: Of course, what are old friends for?

A good little expression that you say when a friend asks if you could possibly do a well appreciated favor.

Alicia and I think that <u>fitting in</u>, being part of a community, might do me some good.

"To fit" into a community is to live in it and be an accepted part of it.

Familiar places, familiar people,might elbow out these certain delusions that I have.

"To elbow out" something is to force it out because it doesn't fit. A "delusion" is a fantasy or belief in a person's mind, but it's not real.

I was wondering if I could <u>hang around</u>.

"To hang around" is a very common phrasal verb which means to pass time in a specific place, often doing nothing in particular.

This guy tries to <u>wander</u> into the library but he doesn't have <u>I.D.</u> :: Why can't people read their <u>memos</u>?

"To wander" is to move from one place to another, without any aim or direction. "I.D." is short for identification (such as a driver's license). A "memo" is a short note that is often passed to many people.

Is this what you are, soldier, some useless <u>ghoul</u>? The local <u>madman</u>? A "ghoul" is a legendary monster that feeds on dead people in their graves. A "madman" is a crazy person.

- You're gonna end up in a <u>cell</u>. Old, useless, <u>discarded</u>. In this case, a "cell" is a prison or jail cell. If something is "discarded," it is thrown away and forgotten.
- And while you <u>rock</u> and <u>drool</u>, the world will burn to <u>ashes</u>!
 In this case, "to rock" is to move a rocking chair back and forth.
 "To drool" is to let saliva or spit run out of your mouth. "Ashes" are the material that's left after something has been destroyed in a fire.

You know that stress <u>triggers</u> the delusions.

"To trigger" something is to cause it to start up.

I was wondering if I might <u>audit</u> your course. :: It's an <u>honor</u> Professor Nash. "To audit" a class is to attend it for the educational value, even though you are not officially enrolled in it. If something is an "honor," it is a privilege or a feeling that causes great pride.

You're just <u>humiliating yourself</u>! It's <u>pathetic</u>! If you "humiliate yourself," you do something that is completely embarrassing in front of other people. "Pathetic" is a powerful adjective meaning so bad it's pitiful.

It only appears to work <u>sporadically</u>, so, no. If something works "sporadically," it only works on occasion or inconsistently.

I've been developing a theory...to <u>come up with</u> something totally original, the way you did. "To come up with" something is to think of it or create it.

...and <u>so on and so forth</u>, until the two bikes <u>collided</u> and the poor little fly is <u>squashed</u>.

"So on and so forth" is a way of saying things continued the way they were going before. "To collide" is a violent verb that is used when two things hit or run into each other, usually by accident. If a fly is "squashed," it is completely crushed.

This is the important thing about actually <u>focusing</u> and <u>comprehending</u> the area that you're dealing with.

"To focus" on something is to concentrate on it. "To comprehend" something is to understand it.

A classroom with 50 students can be <u>daunting</u> for anyone. If a job is "daunting," it is so difficult that it is intimidating or scary.

John, you're a terrible teacher. :: I'm <u>an acquired taste</u>, Martin. An excellent expression to describe wine or food or people that are difficult to like at first, but which become more enjoyable with the passing of time and experience.

I've gotten used to ignoring them and as a

result I think they've kind of given up on me.

If you "give up on" a person, you decided that they are hopeless and no longer worth your time or effort. They're my past, Martin. Everybody is <u>haunted by their past</u>. If a person is "haunted by their past," they are deeply troubled or disturbed by something terrible that happened to them.

I'll <u>ring</u> her.

"To ring" a person is to telephone them.

The world gives John its highest recognition.

My name is Thomas King and I'm here to tell you that you're being considered for the Nobel Prize.

The most prestigious award in the world, given yearly for work in such areas as math, economics and literature.

Over the past few years, your <u>equilibrium</u> has become the <u>cornerstone</u> of modern economics.

"Equilibrium" is a scientific term for balance and a key concept in Nash's work. If a theory is the "cornerstone" of a science or organization, it serves as the foundation or most important part.

The application of your <u>bargaining</u> problem to FCC bandwidth auctions or to antitrust cases.

"To bargain" is to negotiate. The "FCC" is the Federal Communications Commission, which regulates TV and radio in the US. "Bandwidth" refers to the medium or cable in which TV, radio or data signals travel from one place to another. An "auction" is a sale of goods that is sold to the person who offers the most money. "Antitrust" is the area of law that deals with making sure there is always competition in the market.

Most commercially available brands of tea are not <u>suitable</u> to my <u>palate</u>. "Suitable" means appropriate or correct. A person's "palate" is their sense of taste.

- That is generally the case, but these are <u>special circumstances</u>. If a situation has "special circumstances," there are factors that make it extremely unusual or different than normal.
- The rewards are <u>substantial</u>. They require private funding. Another word for serious or important, or in this case, valuable.

You came here to find out if...I would <u>screw everything up</u> if I actually won. "To screw up" something is to do it badly, or even destroy it, or in this case, to cause great embarrassment for all involved. Dance around the <u>podium</u>, <u>strip naked</u> and

dance like a chicken? Things of this nature?

The "podium" is a piece of furniture behind which a person giving a speech stands. If you "strip naked," you take off all your clothes. "Of this nature" is a way of saying "like this."

I still see things that are not here. I just choose to not <u>acknowledge</u> them. "To acknowledge" someone is to recognize them as true or valid.

Like a diet of the mind, I choose not to <u>indulge</u> certain appetites.

"To indulge" an appetite is to eat as much as one likes, even if it is not good for them. In general, to indulge in something is to do it even if it is very expensive or unhealthy.

Like my appetite for <u>patterns</u>.

In nature, a model or sample of physical traits or characteristics that occur over and over (For example, blue and red stripes on a dress).

It's a privilege, Professor.

A word for a right that is given, or more specifically here, an honor.

I've believed in numbers, in the <u>equations</u> and <u>logic</u> that lead to reason. In math, an "equation" is formal statement, such 3+2=5. "Logic" is the use of formal principles and reasoning ("If A is bigger than B and B is bigger than C, than A is bigger than C"). In this case, "reason" is the act of thinking in a logical way.

After a lifetime of such <u>pursuits</u>...

A "pursuit" is a an activity that one engages in, or more generally, a goal or endeavor.

My <u>quest</u> has taken me through the physical,

the <u>metaphysical</u>, the delusional and back.

A person's "quest" is their journey, or act of searching for something important, such as the truth. If something is "metaphysical," it is beyond the physical world and associated with the spiritual world.

I have a car outside; Interested in a <u>ride</u>?

A key word; The act of transporting a person in a car.

Nash's theories have influenced global trade negotiations, national labor relations and even <u>breakthroughs</u> in <u>evolutionary biology</u>.

A "breakthrough" in science is a major advance or discovery. "Evolutionary biology" is the study of how animal and plant species develop over long periods of time.

A Beautiful Mind

Possible Topics for ESL Class Discussion

1) Do madness and genius appear often together?

2) Would John Nash not have been a genius without the schizophrenia?

3) Do you know anybody who has suffered from schizophrenia? How has it compared to what John experienced?

4) In what ways were John's life and modern history related?

5) Should the state have the right to force schizophrenics into mental institutions in order to give them treatment?

6) How are the mentally ill treated in your culture?

7) Ultimately, was this film optimistic?

8) What did you like and not like about it?