- 1. **Anchoring:** What you compare to when you evaluate. Restaurants put expensive things on menu to make other things seem reasonable. A good life in Ottawa vs. in the Congo
- 2. **Contrast/context effect:** Observing 2 things at once makes you focus on their differences. So men looking at photos of beautiful women will then rate their wife as less attractive
- 3. Distinction bias: Things appear more different when viewed simultaneously
- 4. **Bandwagon effect:** Believe things because everyone believes the same thing. Why cults keep you from talking to people not in the cult.
- 5. **Herd instinct:** Believing what everyone else does to avoid social conflict (being vegan because your boyfriend is)
- 6. Hostile media effect: When you watch the news, you tend to think they are hostile to your political views
- 7. **Endowment effect/Loss aversion:** People demand more to give up an object than they were willing to pay to get it. Owning something makes it more valuable to you.
- 8. **Temporal discounting:** Valuing things in the future less than things now.
- 9. **Moral credential effect/self-licensing/moral licensing:** Thinking of yourself as having acted morally can make you allow yourself to behave badly. People compensate to reach equilibrium
- 10. Risk compensation: Seatbelts, bike helmets, dietary supplements, etc.
- 11. **Confirmation bias:** Accepting, seeking out, and remembering things that support your views.
- 12. **Negativity bias:** People pay more attention to negative information because it's evolutionarily important
- 13. **Omission bias:** Thinking that doing harm is worse than not doing something that causes equal harm
- 14. **Outcome bias:** Judging a decision based on what ended up happening rather than on the information available at the decision making time. Right to punish someone who kills a person while drunk driving more severely than another drunk driver who didn't kill anyone?
- 15. Planning fallacy: Underestimating how long it will take us to complete tasks
- 16. **Wishful thinking:** Believing something because you want it to be true. Like the innocence of someone you care about.
- 17. **Availability heuristic:** Assuming that things that are most easily brought to memory are more common. Vivid and emotional things come to memory easier so seeing murders on the news makes them seem more common than they are.
- 18. Base rate neglect: Using Bayesian Probability one can determine more accurate probabilities

- 19. **Belief bias:** If rain is wet then my roof is wet. My roof is wet. Therefore, rain is wet.
- 20. **Conjunction fallacy:** Ex. What's more common a person who wears birks or a hippie who wears birks
- 21. **Gambler's fallacy:** Ex. When flipping a coin over and over which outcome is least probable?
- 22. **Pareidolia, clustering illusion, and illusory correlation:** Different ways for us to see patterns where none actually exist
- 23. **Primacy and recency effects:** We remember the beginnings and endings better than the other parts of things
- 24. **Just world phenomenon:** Thinking the world is ultimately a just place, you will have a tendency to look for reasons to blame victims of inexplicable injustices.
- 25. **Actor-observer bias:** The tendency to explain the behaviour of others in terms of stable traits and to explain one's own actions in terms of reactions to the situation 26. **U-shaped grammar curve:** Went, goed, went
- 27. **Universal grammar theory:** The mind has a bunch of switches that get set when you learn a language as a child (like the subject omission switch that changes across languages)
- 28. Critical stages of years 3-5: Children learn 2-4 new words per day
- 29. Piaget's Stages: 1 Sensorimotor (birth-2) Object permanence
- 2 Pre-operational (2-6) Lack of conservation
- 3 Concrete operational (7-11) Reversibility
- 4 Formal operational(11-death) Deductive reasoning
- 30. **Sensorimotor:** Simple reflex action to symbolic processing. Seen through adapting to and exploring environment, object permanence, and using symbols
- 31. **Pro-operational:** Using symbols to represent objects and events. Egocentrism (unable to see world from another's viewpoint) and centration (a narrow focused thought like no conservation of liquid)
- 32. **Concrete operational:** Mental operations to solve problems and reason (induction). Issues thinking abstractly and hypothetically.
- 33. **Formal operational:** Can apply mental operations to abstract entities and think hypothetically
- 34. Piaget's Contributions: The beginning of studying cognitive development and constructivism (children are active participants in their own development)
- 35. **Problems with Piagetian theory:** Underestimates infants, overestimates adolescents. Is vague on processes and change mechanisms. Doesn't account for variability. Underestimates social and cultural influences.

- 36. **Lev Vygotsky:** Focused on social and cultural things. Associated with intersubjectivity, guided participation, zone of proximal development, scaffolding, private speech, and inner speech.
- 37. Intersubjectivity: Shared understanding among participants of an activity
- 38. **Guided participation:** Cognitive growth results from children's involvement in structured activities with others who are more skilled
- 39. **Zone of proximal development:** The difference between what a child can do alone from with help
- 40. **Scaffolding:** Teaching style that matches the amount of assistance to the learner's needs
- 41. **Private speech:** Comments not directed to others but intended to help children regulate on their own
- 42. Inner speech: Thought, internalized private speech, serving the same function
- 43. **Self-control:** Kids good at the marshmallow test were also found to be good at distracting themselves and turned out to be more successful in the future
- 44. How children improve information processing: Better strategies, increased working memory, better inhibitory and executive functioning, increased automatic processing, and increased speed of processing.
- 45. **Core knowledge theories:** Distinctive domains of knowledge, some of which are acquired early. Explains why kids learn language but not calculus easily. Against the general intelligence approach to development and cognition.
- 46. **Object permanence:** Around 4.5 months children learn that objects can move in continuous paths and that they can't move through other objects
- 47. **Things:** 12-5 mo. can tell the difference between animate objects and inanimate objects, understand movement, growth, internal parts, inheritance, illness, and healing
- 48. People: Theory of mind comes around 2-5 years
- 49. **Dreaming:** Occurs in REM and non-REM.
- 50. **NREM sleep:** 75% of our sleep is non-REM. Dreams in this state are short, dull, and undreamlike.
- 51. REM sleep: There is a rapid eye movement, muscle atonia, and often dreaming
- 52. **Visual anoneria and visual irreminiscence:** People who have no dream imagery (first term) also have a waking deficit in imagining memories (second term)
- 53. **Dream recall:** Typically we forget dreams. Correlates with visuospatial skill and individual differences in working memory. Common that there is much more to a dream than one is able to report
- 54. **Recording dreams:** Ask people what their dreams tend to be like, ask them to keep a dream diary and report their dreams in the morning. Wake people during sleep and get reports (scientifically the best)

- 55. What are dreams like?: Lots of scene shifts, narrative, first person, emotions match content. Animated, rarely are bizarre.
- 56. What are dreams not like?: Films, visual images, recent social situations, and pre-sleep behaviour are rarely incorporated into dreams. Recent episodic memories and salient ones are rarely incorporated.
- 57. **Inference from the world because of dreams:** Dreaming you need to urinate. Speculative (dreaming of teeth falling out caused by tooth grinding)
- 58. Effecting dreams: Pre-sleep attention to a specific concern (dream incubation)
- 59. Threat simulation theory (TST): By Antti Revonsuo, a function of dreaming is to practice dealing with threats that were common in our ancestral environment
- 60. **Support for TST:** Animal dreams are highest in kids and decrease with age, negative emotions appear twice as often as positive ones. Recurring dreams are usually those where you're being threatened. Westerners dream of things we rarely experience, ancestral threats are overrepresented, and people react appropriately to dream threats 94% of time.
- 61. Play and phobia: Ancient survival behaviours are over-represented in play and in phobias. Animals play appropriately for what they need to learn to do.
- 62. **The dreaming brain:** Brainstem is very active, sending info forward. The DLPFC is deactivated which could explain our reduced reasoning ability during dreams. Not being able to notice what's weird, uninhibited behaviour, and difficult to remember dreams.
- 63. **AIM model of conscious states:** Activation basic level of brain activation Information flow sensory input vs. internal, fictive input
- Mode of information processing aminergic-cholinergic neuromodulation Activation-synthesis hypothesis - dreams are the cortex trying to make sense of chaotic inputs from the brainstem
- 64. **Activation synthesis hypothesis:** Dream emotion seems to shape dreams (not other way around) and dream recall cessation is almost always caused by forebrain lesions
- 65. **Lucid dreaming:** Knowing that you're dreaming and being able to control your actions and other dream content. Able to control eyes in real world, could be the reactivation of the DLRFC allowing you to see dream content for what it is and control yourself. Train by keeping dream diaries and doing reality checks.
- 66. **Sleep paralysis:** Feeling awake with chest pressure sometimes, can't move, muscle atonia carried over from sleep. Have hallucinations of malevolent characters.
- 67. **Evolution:** Occurs whenever these three things exist: diversity (mutations and crossover), selective reproduction (survival and reproduction), transmitted change (genetic, taught, and imitated)

- 68. **Peppered moth evolution:** Originally, the "typica" moth (right) flourished in England, because it blended in with the lichens on trees. During the industrial revolution, the trees became covered with soot, resulting in the flourishing of the darker "carbonaria" (left). When England cleaned itself up, "typica" made a comeback
- 69. **Evolutionary psychology:** Explains traits like evolutionary adaptations. Generates hypotheses, but they must be tested.
- 70. Adaptationism: Theorizing about evolutionary causes for phenotypes
- 71. **Predetermination:** Genetic influence that is mostly independent of the environment (eve colour)
- 72. **Exaptation:** Something evolved for one purpose is used for another (female orgasm in primates, bird feathers, jaw bones exapted to inner ear bones in humans)
- 73. Overridable: Bitter foods and drinks like coffee
- 74. **Baldwin Effect (predisposition):** We evolved to learn something easily (language)
- 75. **Cortical & neural recycling:** We like the taste of aspartame which has no nutritional value
- 76. **Cultural feedback loops:** Less hair leads to fewer pests making fire and clothing allows it to happen
- 77. **Neoteny in humans:** Small jaw, upright posture, big head, less developmental change, less aggression, secual and natural selection
- 78. The mind from the perspective of evolutionary psychology: Minds evolved during pleistocene/paleolithic time. Our minds are a collection of special-purpose mechanisms for dealing with specific problems kinds of problems
- 79. **Mate selection:** Men will be most attracted to healthy women who can bear children and women should be more attracted to men who will provide resources to help raise the offspring. Men like a low waist to hip ratio (.7) and low ratios produce smarter children healthier women.
- 80. "What women want": Look for a compatible immune system and testosterone makes men look more more masculine.
- -More masculine faces during ovulation
- -More feminine faces when not ovulating
- -Assume masculine faced men will be poorer parents
- -High prestige for long-term and dominant men for short-term
- 81. Memory: We should remember better things for survival
- 82. Married people show correlations for the following: Breadth of nose, length of earlobe, wrist measurements, distance between eyes, and lung volume (0.2 correlation). Length of middle finger correlates with 0.61
- 83. **Taste in food:** Fat, salt, proteins, and sugar are important because they used to be vary rare in our evolutionary history