

contents

introduction **1**

evolution **7**

Rule #1: The human brain evolved, too.

Tour the amazing brain! ~ What's uniquely human about us? ~ Goldilocks and the Swedish sauna ~ A brilliant survival strategy ~ How we conquered the world

exercise **31**

Rule #2: Exercise boosts brain power.

Will you age like Jim or like Frank? ~ Our brains love motion ~ The incredible test-score booster ~ How oxygen builds roads for the brain

wiring **53**

Rule #3: Every brain is wired differently.

Neurons slide, slither, and split ~ Experience makes the difference ~ Furious brain development not once, but twice ~ The Jennifer Aniston neuron

attention **77**

Rule #4: We don't pay attention to boring things.

Emotion matters ~ Why there is no such thing as multitasking ~ We pay great attention to threats, sex, and pattern matching ~ The brain needs a break!

short-term memory **101**

Rule #5: Repeat to remember.

Memories are volatile ~ How details become splattered across the insides of our brains ~ How the brain pieces them back together again ~ Where memories go

long-term memory **127**

Rule #6: Remember to repeat.

If you don't repeat this within 30 seconds, you'll forget it ~ Spaced repetition cycles are key to remembering ~ When being underwater could help you remember something

sleep 155

Rule #7: Sleep well, think well.

The brain doesn't sleep to rest ~ Two armies at war in your head ~ How to improve your performance 34 percent in 26 minutes ~ Which bird are you? ~ Sleep on it!

stress 177

Rule #8: Stressed brains don't learn the same way as non-stressed brains.

Stress is good, and stress is bad ~ A villain and a hero in the toxic-stress battle ~ Why the home matters to the workplace ~ Marriage intervention for happy couples

sensory integration 205

Rule #9: Stimulate more of the senses.

Lessons from a nightclub ~ How and why our senses work together ~ Multisensory learning means better remembering ~ What's that smell?

vision 229

Rule #10: Vision trumps all other senses.

Playing tricks on wine tasters ~ You see what your brain wants to see, and it likes to make stuff up ~ Throw out your PowerPoint ~ Pictures are simpler

gender 251

Rule #11: Male and female brains are different.

Sexing humans ~ The difference between little girl best friends and little boy best friends ~ Men favor gist when stressed; women favor details ~ A forgetting drug

exploration 271

Rule #12: We are powerful and natural explorers.

Babies are great scientists ~ Exploration is aggressive ~ Monkey see, monkey do ~ Curiosity is everything

acknowledgements 293

index 295