

# FAST Vocabulary Guide

Class Period: \_\_\_\_\_

Name: \_\_\_\_\_

**Overview:** The following vocabulary guide outlines all of the important vocabulary that is frequently used in the Foundations of Applied Science & Technology course. Vocabulary words are broken down by which modules the word is first introduced. Vocabulary has also been sub-divided into smaller groups where appropriate to make it easier to find key words based on a specific topic (i.e. lab equipment).

## Action Words:

The following action words (verbs) are used throughout the entire FAST program. You should familiarize yourself with all of these words. These words will appear in instructions in your homework, classwork, as well as in most minor and major assignments. Understanding these words will help you understand the objectives of each learning activity. This is because these words tell you what you need to do.

FAST Action Words			
English	IPA	PinYin	Chinese
Attempt	/ə'tempt/	Chángshì	尝试
Calculate	/'kælkjʌ,leɪt/	Jìsuàn	计算
Clean	/kli:n/	Gānjìng de	干净的
Compare	/kəm'per/	Bǐjiào	比较
Convert	'kɒnvɜrt	Zhuǎnhuàn	转换
Create	/'kri:'eɪt/	Chuàngjiàn	创建
Cross-examine	/'krɒ:s_ɪg'zæmɪn/	Bǐjiào, tāolùn	比较、讨论
Demonstrate	/'demənstreɪt/	Yǎnshì	演示
Describe	/'dɪ'skraɪb/	Miáoshù	描述
Determine	/'dɪ'tɜ:rmɪn/	Quèdìng	确定
Differentiate	/'dɪfə'renʃi:,,eɪt/	Qūfēn	区分
Discuss	/'dɪ'skʌs/	Tǎolùn	讨论
Evaluate	/'ɪ'vælju:,,eɪt/	Píngjià	评价
Explain	/'ɪk'spleɪn/	Jiěshì	解释
Explore	/'ɪk'splɔ:r/	Tànsuǒ	探索
Find	/'faɪnd/	Cházǎo	查找
Identify	aɪ'dentə'faɪ	Shìbié	识别
Interpret	/'ɪn'tɜ:rprɪt/	Jiěshì	解释
Make	/'meɪk/	Zhìzào	制造
Measure	/'meʒər/	Cèliáng	测量
Plan	/'plæn/	Jìhuà	计划
Read	/'ri:d/	Yuèdú	阅读
Record	/'sɑ:lɪv/	Jìlù	记录
Solve	sɒlv	Jiějué	解决
Support	sə'pɔrt	Zhīchí	支持
Track	træk	Guǐdào	轨道
Visualize	/'vɪʒu:ə'laɪz/	Kěshìhuà	可视化

# FAST Vocabulary Guide

Unit 1 Vocabulary			
English	IPA	PinYin	Chinese
Algorithms	/ˈælgəˌrɪðəmz/	Suànfǎ	算法
Claim	/kleɪm/	Shēngmíng	声明
Column	/ˈkɔːləm/	Liè	列
Conclusion	/kənˈkluːʒən/	Jiélùn	结论
Differences	/ˈdɪfərənsɪz/	Chāyì	差异
Evidence	/ˈeɪdəns/	Zhèngjù	证据
Findings	/ˈfaɪndɪŋz/	Diàochá jiéguǒ	调查结果
Functions	/ˈfʌŋkʃənz/	Gōngnéng	功能
Hypothesis	/haɪˈpəːθɪsɪs/	Jiǎshè	假设
Hypothetical	/ˌhaɪpəˈθetɪkəl/	Jiǎshè de	假设的
Logic	/ˈlɔːdʒɪk/	Luójí	逻辑
Matrices	/ˈmeɪtrɪˌsiːz/	Jǔzhèn	矩阵
Negation	/nɪˈɡeɪʃən/	Hìdìng	否定
Nested	/ˈnestɪd/	Qiàn tào de	嵌套的
Operators	/ˈɑːpəˌreɪtərz/	Cāozuò yuán	操作员
Pattern	/ˈpætərn/	Tú'àn	图案
Question	/ˈkwɛstʃən/	Wèntí	问题
Reasoning	/ˈriːzənɪŋ/	Tuīlǐ	推理
Results	/rɪˈzʌltəɪvz/	Jiéguǒ	结果
Row	/raʊ/	Pái	排
Similarities	/ˌsɪməˈlærɪtiːz/	Xiāngsì zhī chù	相似之处
Solution	/səˈluːʃən/	Jiějué fāng'àn	解决方案
Statements	/ˈsteɪtmənts/	Shēngmíng	声明
Venn Diagrams	/Venˈdaɪəgræməz/	Wéi ēn tú	维恩图

Unit 1 - Logic Statements			
English	Statement	Notation	Chinese
Conditional	IF p, THEN q	$p \rightarrow q$	原命题/条件命题
Conjunction AND	P AND q	$p \wedge q$	∧: 和
Contrapositive	IF NOT q, THEN NOT p	$\sim q \rightarrow \sim p$	逆否命题
Converse	IF q, THEN p	$q \rightarrow p$	逆命题
Disjunction OR	p OR q	$p \vee q$	∨: 或
Inverse	IF NOT p, THEN NOT q	$\sim p \rightarrow \sim q$	否命题

Unit 2 Vocabulary			
English	IPA	PinYin	Chinese
Average	/ˈævərɪdʒ/	Píngjūn shù	平均数
Bias	/ˈbaɪəs/	Piānchā	偏差
Equation	/ɪˈkweɪʒən/	Fāngchéng	方程式
Fact	/fækt/	Shìshí	事实
Formula	/ˈfɔːrmjələ/	Kōshìkì	公式
Inferences	/ˈɪnfərənsɪz/	Tuīlùn	推论
Laboratory	/ˈlæbrətɔːriː/	Shíyàn shì	实验室
Objective	/əbˈdʒektɪv/	Mùbiāo	目标
Observation	/ˌɑːbzɜːrˈveɪʃən/	Guānchá	观察

# FAST Vocabulary Guide

Unit 2 - Lab Equipment			
English	IPA	PinYin	Chinese
Beaker	/ˈbi:kər/	Shāobēi	烧杯
Digital Scale	/ˈdɪdʒɪtl skeɪl/	Diànzǐ chéng	电子秤
Flask	/flæsk/	Shāopíng	烧瓶
Graduated Cylinder	/ˈgrædʒʌwətɪd ˈsɪlɪndər/	Liángtǒng	量筒
Pipette	/paɪˈpet/	Yí yè guǎn	移液管
Stopwatch	/stɔ:p wɑ:tʃ/	Miǎobiǎo	秒表
Test Tubes	/test tu:bz/	Shìguǎn	试管

Unit 2 - Describing Graphs			
English	IPA	PinYin	Chinese
Bar Graph	/bɑ:r græf/	Zhù xíng tú	柱形图
Categories	/kætəˌgɔ:ri:z/	Zhǒnglèi	种类
Decreasing	/dɪˈkri:sɪŋ/	Jiǎnshǎo	减少
Exponential	/ˌɛkspouˈnɛntʃəl /	Zhǐshù	指数
Gradually	/ˈgrædʒu:əli:/	Zhújiàn de	逐渐地
Graph	/græf/	Túbiǎo	图表
Greater	/ˈgreɪtər/	Jiào dà de	较大的
Increasing	/ɪnˈkri:sɪŋ/	Zēngjiā de	增加的
Legend	/ˈledʒənd/	Túli	图例
Line graph	/laɪn græf/	Xiànxíng tú	线形图
Linear	/ˈli:ni:ər/	Xiànxíng de	线性的
Maximum	/ˈmæksɪməm/	Zuìdà xiàndù	最大限度
Minimum	/ˈmɪnəməm/	Zuìdī xiàndù	最低限度
Scale	/skeɪl/	Bǐlì, rú 500:1	比例, 如 500:1
Title	/ˈtaɪtl/	Biāotí	标题
Units	/ˈju:nɪts/	Dānyuán	单元

Unit 2 - Making Measurements			
English	IPA	PinYin	Chinese
Acceleration	/ækˌseləˈreɪʃən/	Jiāsùdù	加速度
Celsius	/ˈselsi:əs/	Shèshìdù	摄氏度
Grams	/græmz/	Kè	克
Kelvin	/ˈkelvɪn/	Kāi'ěrwén	开尔文
Liquid	/ˈlɪkwɪd/	Yètǐ	液体
Litres	/ˈli:tərz/	Shēng	升
Meters	/ˈmi:tərz/	Mǐ	米
Size	/saɪz/	Dàxiǎo	大小
Speed	/spi:d/	Sùdù	速度
pH	/pi: eɪtʃ/	Suānjiǎndù	酸碱度
Temperature	/ˈtɛmpərətʃər/	Wēndù	温度
Time	/taɪm/	Shíjiān	时间
Weight	/weɪt/	Zhòngliàng	重量

