The following exercises aim to enable you to learn how to navigate around SNOMED CT, see how concepts are displayed using a browser and what important information can be extracted from such a view.

**Part 1. Finding your way around the browser**

1) Look at the top level hierarchies in a SNOMED Browser
   How many hierarchies are there ?
   19

   Use the browser to find how many direct child concepts 71388002 |Procedure (procedure) | has ?
   34

2) What is the parent concept of 111475002 |Neurosis (disorder)|?
   74732009 |Mental disorder (disorder)|

3) What are the parent concepts of 111479008 |Organic mental disorder (disorder)|?
   74732009 |Mental disorder (disorder)| and 81308009 |Disorder of brain (disorder)|

4) Look at the concept 52448006 |Dementia (disorder)| and 26929004 |Alzheimer's disease (disorder)|.
   What is the difference in their attribute relationships and why is there a difference?
5) Search for the disorder concept with a description Down syndrome. How many acceptable synonyms does this concept have? (Hint: use details view in browser)

4

What is the preferred term?

Complete trisomy 21 syndrome

What is the Fully Specified Name?

Complete trisomy 21 syndrome (disorder)

What is the Concept ID?

41040004

Part 2. Tips using the browser

1) Try to search for the concept Formed hallucinations of people (finding) using the least amount of characters in the search field. Try to change the order of the words you type and see if it makes a difference.

How about “peo ha”

Word order makes no difference

2) When searching for the term “Detained in hospital under Section 47 of the Mental Health Act 1983 (England and Wales) with Section 49 restrictions (finding)” . Which words do you think are not necessary to type to still return the required concept? of, the, with, a in fact
“47 49” returns concept

3) Search for Depression. How many assessment scale **descriptions** are there that include the text Depression? (Hint: Semantic Tag Filter on left should help)

122

How many assessment scale **concepts** are there that include the text asthma?

41

4) Abbreviations can be helpful when searching for terms.
What abbreviation would you use to find the concept 191736004 |Obsessive-compulsive disorder (disorder)| and does it help?

OCD, Yes

TATT is often used as an abbreviation for Tired all the time. Does this abbreviation make finding the concept Tired all the time (finding) easier?

No, too many concepts with TATT better to search “tir all “

Search for abbreviation CAARMS. What can CAARMS stand for?

**Comprehensive Assessment of At-risk Mental States**
Part 3. Understanding SNOMED CT Hierarchies

The following information might help in making the right choice to the following questions

**Procedure** concepts - represent activities performed in the provision of health care. Includes invasive procedures, administration of medicines, imaging, education, therapies and administrative procedures e.g. removal of suture (procedure)

Clinical **finding** concepts - represent result of a clinical observation, assessment or judgment and include concept used to represent diagnosis e.g. asthma (disorder), tired all the time (finding).

**Procedures** and **Findings** have the following default context

- Refers to patient of record (Subject of record)
- Occurring now or at a specified time (Current or specified time)
- Finding is actually present (Known present)
- Procedure has actually occurred (Done)

**Situation** concepts - represents concepts in which the clinical context is specified as part of the definition of the concept itself. For example, when the conditions are absent or in the past or relate to someone other than the subject of the record e.g. Vasectomy planned (situation)

The **observable** concepts - Represent a question or assessment which can produce an answer or result e.g. Gender (observable)

**Assessment Scales** concepts - Represents assessment scales, questionnaires and tumour staging systems

1) Search for the term ‘dressing’ in your browser. Which one of the concepts returned would be used for ‘observing that a patient can dress’

   **Dressing** (observable entity)

Which one of the concepts returned would be used for ‘the patient is dressed inappropriately’?

   **Inappropriately dressed** (finding)
2) Search for a term in your browser.

Which concept would you use for the action of ordering a blood serotonin level?

412837009 |Blood serotonin measurement (procedure)|

Which concept would you use for recording a blood serotonin level?

1021811000000106 |Blood serotonin level (observable entity)|

Which concept would be used to state a serotonin level that has increased?

131139004 |Increased serotonin level (finding)|

Can you see the importance of knowing whether a concept is an observable or finding or procedure?

3) For each of the following descriptions, to which hierarchy do you think their concept belongs out of the following options (have a guess first and if stuck use the browser to help):
Disorder, Finding, Situation, Procedure, Observable

Alcohol abuse by father _______ Situation______________________

Difficulty speaking _______ Disorder _________________________

Difficulty speaking intelligibly _______ Finding _________________

No family history of epilepsy _______ Situation__________________
Body weight
Weighing patient
Body weight measurement declined
Overestimates own body weight
Complaining of insomnia
Family history of substance abuse
On examination - agitated
On examination - no fit/convulsion seen
History of abuse
Headache
No headache
Dementia
Dementia medication review
Suspected dementia
Systolic arterial pressure
Decreased systolic arterial pressure
4) The Generalized Anxiety Disorder 7 (GAD-7) is commonly used in healthcare.

What is the FSN of the concept for conducting the assessment?

Assessment using generalized anxiety disorder 7 item score (procedure)

What are the FSN's of the concepts for recording a value against?

Generalized anxiety disorder 7 item score (observable entity)

What is the FSN of the concept for the scale itself?

Generalized anxiety disorder 7 item scale (assessment scale)

What is the FSN of the concept if the assessment is declined?

Assessment using Generalized Anxiety Disorder 7 item scale declined (situation)