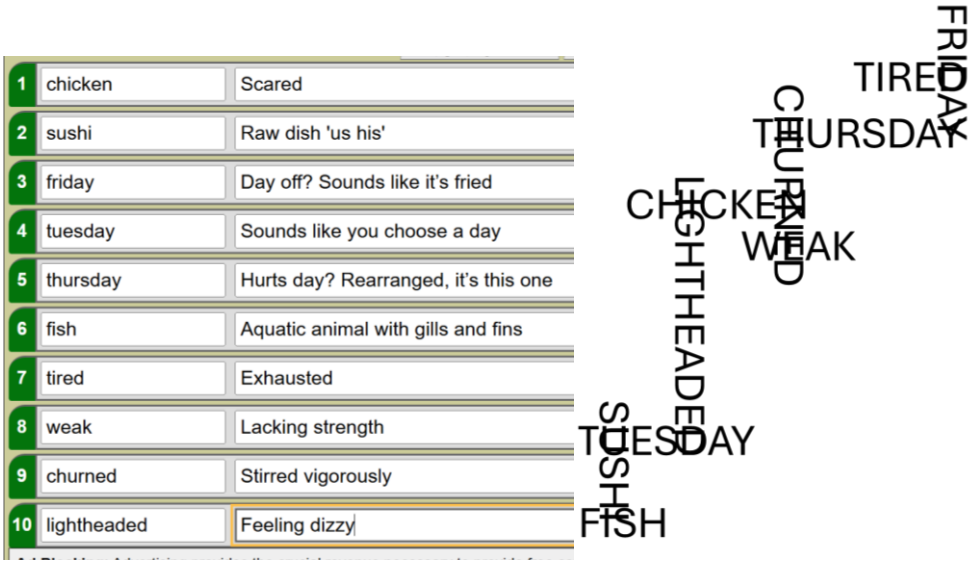
BTS NEST FISH IN A DISH PUZZLE

1. **Please complete the crossword below to finish the introductory paragraph.**

After a long week at work, Marcus treated himself to dinner on **Friday** at a trendy new **sushi** bar downtown. He'd already eaten out several times during the week—grabbing a quick **chicken** wrap from a street vendor on **Tuesday** and enjoying grilled **fish** at a local bistro on Thursday. However, within hours of finishing his meal on Friday, Marcus began to feel unwell. He was more **tired** than usual, a dull ache settled in his side, and his stomach **churned** with a vague discomfort he couldn't quite place. By the next morning, his skin looked oddly pale, and he felt lightheaded and weak. Alarmed at the discomfort, he phoned 111 for advice.

Your responsibility is to investigate the symptoms Marcus is experiencing and to retrace his recent activities to identify the underlying cause of his condition.



Word to get the next worksheet: <u>DEADLY</u>

2. **On the phone to 111 they ask many questions to be able to understand what is going on. Complete the questions based on your answers to the crossword.**

- When did Marcus first start feeling unwell?

Friday

- What were Marcus' initial symptoms?

More tired than usual, a dull ache settled in his side, and his stomach churned with a vague discomfort

- How does Marcus feel now?

Skin looked oddly pale, and he felt lightheaded and weak

- Have you eaten anything recently that may have caused these symptoms?

Chicken, sushi or fish

Clinical Biochemistry - ANSWERS

You have been sent a copy of Marcus' blood work, but unfortunately it seems that the file was corrupted. Luckily you are familiar with the hospital's digital scrambling procedure and can work back the test names. Shift each letter of the scrambled text by X number of positions down the alphabet to decipher the test results.

Unscrambled test	**Result**	**Normal Range**
Serum Creatinine	120 µmol/L	59 – 104 µmol/L
eGFR	85ml/min/1.73m^2	≥90 mL/min/1.73m^2
Potassium	6 mmol/L	3.5-5.5 mmol/L
Sodium	128 mmol/L	133-146 mmol/L
Urea	2.2 mmol/L	2.5 – 7.8 mmol/L
Bilirubin	25 µmol/L	0 – 21 µmol/L
Albumin	30 g/L	35 – 50 g/L
Total Protein	56 g/L	60 – 80 g/L
LDH	262 U/L	< 250 U/L
Haptoglobin	0.24 g/L	0.3 – 2 g/L
ALT	72 IU/L	10 – 60 IU/L
ALP	141 IU/L	30 – 130 IU/L
GGT	40	<55 IU/L
International Normalised Ratio	2	0.8 to 1.2

Last software update: December 12th, 2012

HINT: The date is the shift cipher number (12).

Answer for next worksheet: International normalised ratio, ALP, ALT, Haptoglobin, LDH, Total protein, Albumin, Bilirubin, Sodium, Potassium, eGFR, Serum Ceatinine

Clinical managements for Liver toxicity and Haemolysis - <u>ANSWERS</u>

Answers:

1. N) Stabilise airway, breathing, circulation (ABCs)
2. O) Every 6-12 hours
3. X) Peripheral smear
4. I) To prevent haemoglobin-induced kidney injury and maintain renal perfusion
5. O) N-acetylcysteine (NAC)
6. U) Haemodialysis
7. S) Increase exercise routines

1: N | 2: O | 3: X | 4: I | 5: O | 6: U | 7: S

You have received blood work from 5 different patients and results for 3 Food samples from restaurants, which were sent to the laboratory for analysis using Liquid Chromatography-Mass Spectrometry. Your task is to determine contaminated food by analysing the data.

Answer: Local food bistro

You have received aerial views detailing the trip of the fishing ship, the migration of a population of sea snails, and the movement of an oil spill in the nearby river, where fish and seafood are caught to serve local restaurants.

Can you identify the time frame of the catch that might have caused the poisoning?

Answer: **07:00**

To win the game:

sea snail poisoning (sea snail poison = toxic agent) of fish (food) that was eaten at the local bistro (place)