

# 1

90929M



909295



NEW ZEALAND QUALIFICATIONS AUTHORITY  
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD  
KIA NOHO TAKATŪ KI TŌ ĀMUA AO!

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## Koiora, Kaupae 1, 2016

**90929M Te whakaatu māramatanga ki ngā ariā koiora e pā ana ki te whāngote hei kaikame**

9.30 i te ata Rāapa 23 Whiringa-ā-rangi 2016  
Whiwhinga: Toru

Paetae	Kaiaka	Kairangi
Te whakaatu māramatanga ki ngā ariā koiora e pā ana ki te whāngote hei kaikame.	Te whakaatu māramatanga hōhonu ki ngā ariā koiora e pā ana ki te whāngote hei kaikame.	Te whakaatu māramatanga matawhānui ki ngā ariā koiora e pā ana ki te whāngote hei kaikame.

Tirohia mēnā e rite ana te Tau Ākonga ā-Motu (NSN) kei runga i tō puka whakauru ki te tau kei runga i tēnei whārangī.

**Me whakamātau koe i ngā tūmahi KATOĀ kei roto i tēnei pukapuka.**

Mēnā ka hiahia whārangī atu anō koe mō ō tuinga, whakamahia te (ngā) whārangī wātea kei muri o tēnei pukapuka, ka āta tohu ai i te tau tūmahi.

Tirohia mēnā e tika ana te raupapatanga o ngā whārangī 2–15 kei roto i tēnei pukapuka, ka mutu, kāore tētahi o aua whārangī i te takoto kau.

**ME HOATU RAWA KOE I TĒNEI PUKAPUKA KI TE KAIWHAKAHAERE Ā TE MUTUNGA O TE WHAKAMĀTAUTAU.**

**TAPEKE**

MĀ TE KAIMĀKA ANAKE









## TŪMAHI TUARUA: TE TUKUPŪNGAO

Ina omahia he oma taumano, me kukuti me te pārore ngā uaua o te kaioma hei whakaputa nekehanga mō te 42 kiromita te tawhiti. Mai i te rua ki te rima haora te roa, me nui te pūngao e puta ana i ngā pūtau uaua mā te tukanga tukupūngao, me tētahi putunga nui o ngā matū māori e hiahia ana mō te tukupūngao. Ka rato ētahi o ēnei matū māori mā te kai i ētahi kai whāiti i mua i te wā o te tauomaoma, me te ngongo i ngā taiora i nakua.

E whā ngā tīpako kai i tukuna ki ngā ākonga, ā, i whakahaerehia ētahi whakamātautau ki ngā tīpako katoa.

### Ngā kitenga whakamātautau mō ngā tīpako kai

Whakamātautau	Whakamātau mō te māngaro	Whakamātau mō te kūhuka	Whakamātau mō te pūmua	Whakamātau mō te ngako
I kitea	tae kikorangi-pango	tae ārani-whero	tae waereti-poroporo	pūata

<b>Tīpako kai A</b>	ārani	ārani-whero	kikorangi kōmā	kāore i te pūata
<b>Tīpako kai B</b>	kikorangi-pango	kikorangi	kikorangi kōmā	kāore i te pūata
<b>Tīpako kai C</b>	ārani	kikorangi	kikorangi kōmā	pūata
<b>Tīpako kai D</b>	ārani	kikorangi	waereti-poroporo	kāore i te pūata

Matapakitia ko tēhea te tīpako kai me tūtohu ngā ākonga hei kai mā tētahi kaioma taumano i te wā i mua o te tauomaoma, e whai whakaaro ana ki ngā hiahia ā-pūngao o ngā uaua o te kaioma ina whakahaerehia te tukanga tukupūngao.

I tō tuhinga me:

- whakaahua i ngā momo tukupūngao ā-pūtau e rua, tae atu ki ngā matū māori ka whakamahia mō ia tukanga
- whakamārama mai ko tēhea te momo tukupūngao ā-pūtau pai ake mō te kaioma i te wā o te tauomaoma taumano
- whakamārama mai ka pēhea te ngongo i ētahi o ngā matū māori mō te tukupūngao ki te kōpiro iti me te kawē atu ki ngā uaua o te kaioma
- parau i tō kōwhiringa tīpako kai.

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**He wāhi anō mō tō tuhinga mō tēnei tūmahi kei te whārangi 8.**









## TŪMAHI TUATORU: NGĀ PŪMUA WHĀKŌKĪ ME TE pH I ROTO I TĒTAHI KAIOTA ME TĒTAHI KAIKIOTA

Pūnaha nakunaku o te hōiho

Pūnaha nakunaku o te tangata

/2013/11/digestive-system.jpg

He kaiota te hōiho, he kai matū tipu anake, ēngari anō te tangata he kaikiota ia, he tino whānui āna kai. He whai pūmua whākōkī whānui ngā hōiho me ngā tāngata i roto i ō rātou pūnaha nakunaku.

Matapakitia te mahi a ngā pūmua whākōkī whāiti i roto i ngā pūnaha nakunaku o tētahi kaiota pēnei i te hōiho me tētahi kaikiota pēnei i te tangata, tae atu ki te āhuetanga o te pupuri i ngā taumata pH tino arotau.

I tō tuhinga me:

- whakamārama mai i te mahi ake a ngā pūmua whākōkī nakunaku i roto i tētahi kaiota pēnei i te hōiho me tētahi kaikiota pēnei i te tangata
- whakamārama he pēhea te whakaawe a te pH i ngā mahi a ngā pūmua whākōkī
- matapaki i ngā ōritetanga i waenga i te āhua o te mahi a ngā pūmua whākōkī i roto i te pūnaha nakunaku o tētahi kaiota pēnei i te hōiho me tētahi kaikiota pēnei i te tangata, Ā, he pēhea te pupuri kia tino arotau te pH i ngā wāhanga rerekē o ēnei pūnaha nakunaku.

**He wāhi anō mō tō tuhinga mō tēnei tūmahi kei te whārangi 12.**











*English translation of the wording on the front cover*

## Level 1 Biology, 2016

### 90929 Demonstrate understanding of biological ideas relating to a mammal(s) as a consumer(s)

9.30 a.m. Wednesday 23 November 2016  
Credits: Three

90929M

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of biological ideas relating to a mammal(s) as a consumer(s).	Demonstrate in-depth understanding of biological ideas relating to a mammal(s) as a consumer(s).	Demonstrate comprehensive understanding of biological ideas relating to a mammal(s) as a consumer(s).

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

**You should attempt ALL the questions in this booklet.**

If you need more space for any answer, use the page(s) provided at the back of this booklet and clearly number the question.

Check that this booklet has pages 2–15 in the correct order and that none of these pages is blank.

**YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.**