

Brackenhurst

Land-based resource booklet Answers



Brackenhurst Students



Brackenhurst Equestrian Centre



Home Farm Roundhouse



Animal Unit

Animal:

Duties of different job roles

1. An animal care assistant is also known as an –
 - a. **Animal technician**
 - b. Animal Care Auxiliary
 - c. Animal Manager
 - d. Animal trainer
2. Animal Care Assistants work in which of the following settings? (select all that apply)
 - a. **Kennel/Cattery**
 - b. **Farm Park**
 - c. Pet Store
 - d. **Rescue/Welfare Centre**
 - e. Zoo
 - f. Vets
3. What do you think the working hours/pattern are of an Animal Care Assistant?

Weekends and full time days

4. Approximately how many hours per week would a Trainee Pet Shop Assistant work if they were full-time?

35

5. Which of the following are duties of an Animal Care Assistant? (select all that apply)
 - a. **Cleaning and maintaining accommodation**
 - b. Supervising staff
 - c. **Grooming animals**
 - d. **Preparing food and feeding animals**
 - e. Planning animal diets
 - f. **Moving and exercising animals**
 - g. **Administering medication**
 - h. Interviewing new staff
 - i. **Health checking animals**
 - j. Purchasing animals for collections
 - k. **Keeping records**
 - l. Assessing animal behaviour for re-homing
 - m. **Answering questions from visitors**

6. Read the list of duties in question 5 for an Animal Care Assistant. Do you think a Trainee Pet Shop Assistant would do any additional/different duties?

Learn about products in the store and provide guidance to customers

7. As a trainee kennel/cattery worker, where may you be working? (select all that apply)
- a. Boarding kennels/cattery
 - b. Police kennels
 - c. RSPCA/ Cat's Protection
 - d. Breeding kennels
 - e. Racing/Hunt kennels
8. What duties do you think a trainee kennel/cattery worker would carry out?
- a. Feeding animals
 - b. Grooming animals
 - c. Cleaning and maintaining kennels/runs
 - d. Setting up welfare campaigns
 - e. Answering telephone calls
 - f. Training animals
 - g. Assessing temperament for re-homing
 - h. Taking bookings
 - i. Approving customers for animal adoption

Industry Events

Event: Crufts Dog Show



When: March over 4 days

Purpose: championship pedigree dog show. Thousands of pedigree dogs shown over the four days to determine the ultimate champion

Activities: dog showing, demonstrations, organisations and the work they do. Hearing dogs, Guide Dogs,

Dog breeds examples of all the breeds registered with the Kennel Club

Sales and retail of food, dog toys

Different uses of dogs in sport and work

Event: Supreme Cat Show



When: November 2 day show

Purpose: Championship cat show for pedigree cats – must be registered to show the cats

Different breeds and ages exhibited .

Top judges judging cats to breed standards

Activities: cat showing and judging, sales and retail of cat related products, talks and demonstrations

Event: Pet and Aquatic Trade Show (PATS)



When: September – 2 days

Purpose: retailers to show products available in the pet retail industry

Up to date products and talks from experts

Examples of over 100 different breeds of animals – exotic pets, birds, fishes etc

Activities: as above

Event: Your Horse Live



When: November

Purpose: showcase the latest in equine sports, equestrian merchandise, talks, demos and retail of products - visitors can buy goods, watch demonstrations and listen to experts giving tips and advice.

Activities: visitors watch demonstrations from experts on all equine sports, show jumping, dressage, pony club

Talks from experts

Retail

Latest products information and showcased

Event: British Pet Show

When: November

Purpose: A show for pet lovers and owners



Activities: sales of pet products, demonstrations, meet pet owners, enter competitions

Latest products on the market for different pets shown from exotic pets to cats, dogs, rabbits etc

Guidance on good pet ownership

Supported by animal welfare charities, like RSPCA etc

Event: Highland Show (Royal)

When: June for 3 days



Purpose: countryside show set in Scotland, connections to the Royal family. Exhibitions of livestock - horses, farming and countryside sports

Activities: Craft tents, produce tents, competitions, livestock showing

Event: British Dog Grooming Championship

When: April



Purpose: Determine the British Dog Groomer of the year

Activities: competitors demonstrate their grooming skills to be judged the winner in different classes

Demonstrations

Equipment sales

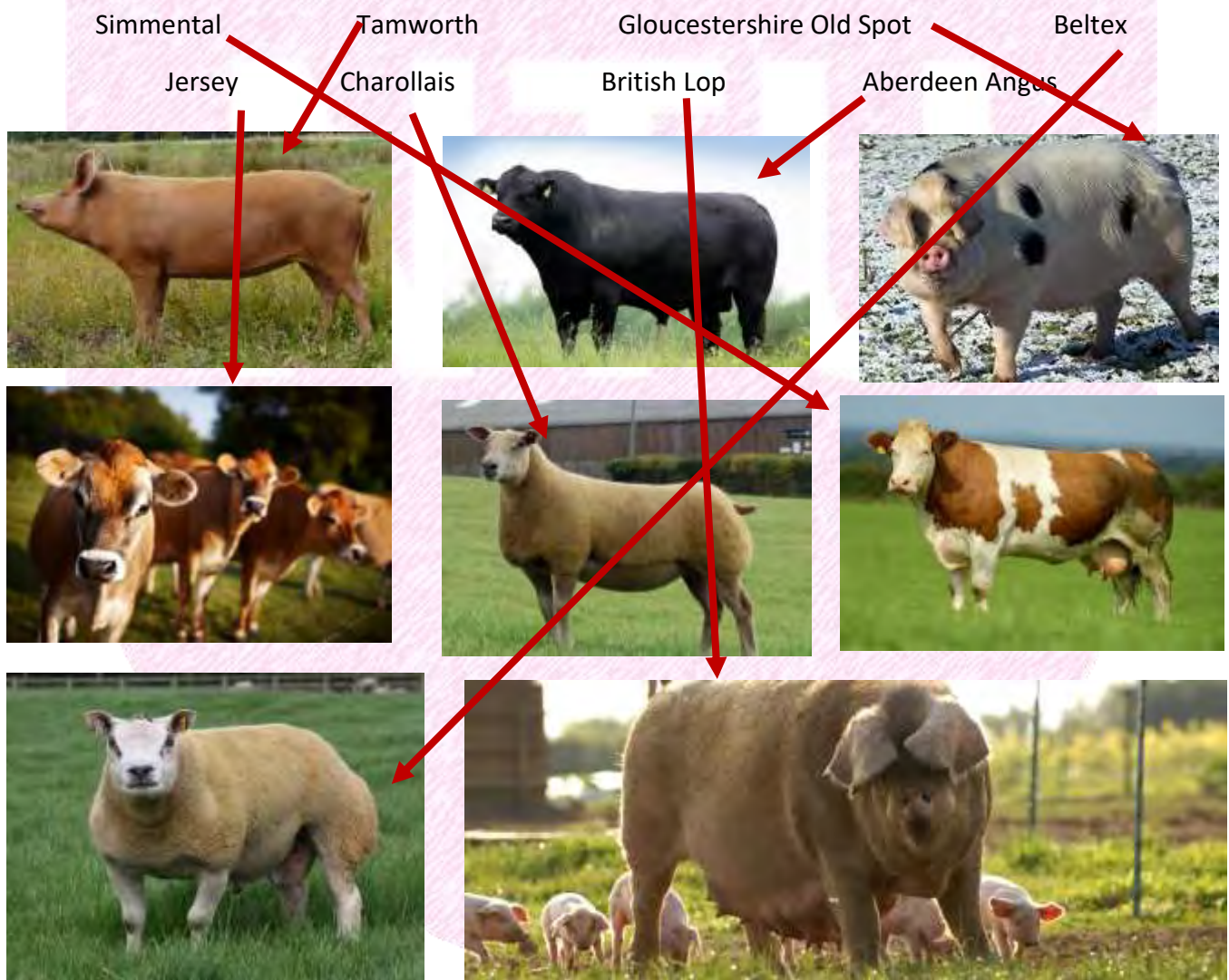
Open to the public and members of the B Dog Groomers Association

If you have enjoyed these tasks, why not have a look at our College Course guide

(https://www.ntu.ac.uk/_data/assets/pdf_file/0018/113742/8165_Brack-FE-brochure-2020-web-EDIT.pdf) where you can find more information on our Animal courses. You can also download an application form from: https://www.ntu.ac.uk/_data/assets/pdf_file/0025/914614/FE-application-form-2020-EDIT.pdf

Do you know the difference between a Gloucestershire Old Spot, Charollais and Simmental?!

Farm livestock have been selectively bred to produce characteristics that favour meat quality and flavour, hardiness in outdoor conditions, milk quality and quantity, wool production and many more. This has been achieved through selecting individuals within breeds and also cross-breeding, to produce the best possible animals. This is important not just for profit – but the animal's welfare too. Take a look at the species and breeds below – do some research – can you match the breed name to the image?



Take a look at the NTU Brackenhurst agriculture Facebook page to see some award-winning Lincoln Reds!

BREED	CHARACTERISTICS	CROSS-BREEDING?
Simmental Cattle	Rapid growth of young, good milk yield	Yes
Tamworth Pig	Elongated head, long, narrow body, high body mass with little fat, firm ham structures.	No
Gloucestershire Old Spot	Large, intelligent, large litters, self-sufficient, spotted skin.	No
Beltex Sheep	Heavy muscling in hindquarters, large lamb growth.	Yes
Jersey Cattle	Adaptable to conditions, relatively small, produce high amounts of good quality milk.	No
Charollais Sheep	Easy to lamb due to head shape, deep, wide, long loin and leg without excessive fat.	No
British Lop Pig	Large ears, gentle temperament, self-sustaining, large.	Yes
Aberdeen Angus Cattle	Muscular, hardy, marbled meat, medium sized.	No

Some things to think about...

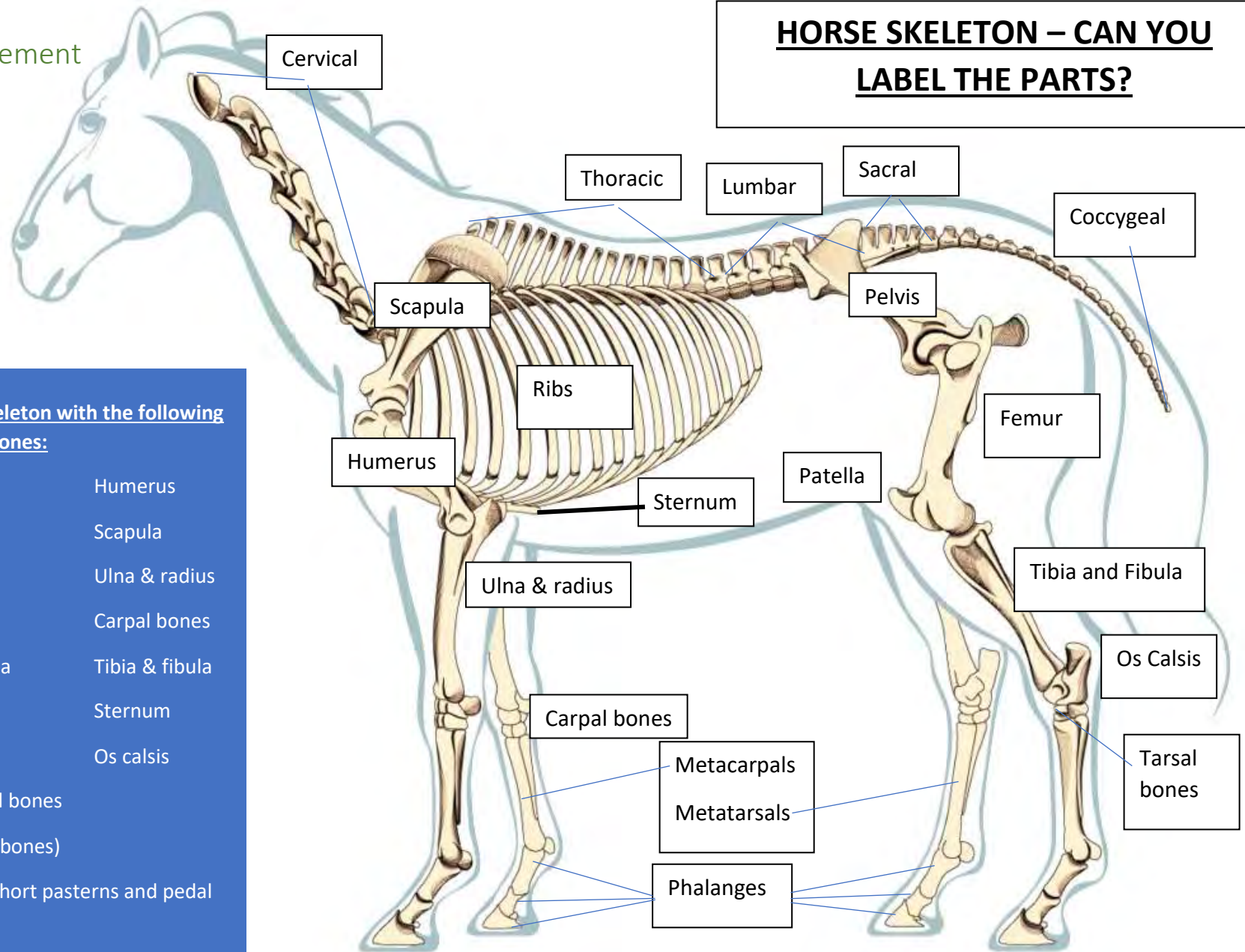
1. What are these breeds used for?
2. How do their characteristics make them suitable for their use?
3. Are any of these breeds produced from cross-breeding?
4. Imagine you are a farmer – what would you produce?
Which breeds would you use and why?

Task 2: Read through the leaflet for Agriculture (overleaf) and answer the True or False questions below. More information can be found on our Level 2 and Level 3 Agriculture courses in our College Course Guide at https://www.ntu.ac.uk/_data/assets/pdf_file/0018/113742/8165_Brack-FE-brochure-2020-web-EDIT.pdf (p. 22-25 for Agriculture) to help.

TRUE OR FALSE?

1. You have to come from a farming family to study our Agriculture courses.
FALSE – applicants from any background are welcome. Just bring your enthusiasm!
2. The Agriculture industry needs an extra 60,000 employees in the next 5 years.
TRUE – the area is growing and demand is high.
3. This is a highly theoretical course with not many practical elements.
FALSE – this course has a good mix of theory and practical work.
4. Brackenhurst has degree and college level agriculture students onsite.
TRUE – both sets of students use facilities, including Home Farm and the Library onsite.
5. You need 4 GCSEs at grade 4 (C) including English, Maths and Science to study our Level 3 Extended Diploma in Agriculture.
TRUE – these are the entry requirements for our Level 3 Agriculture course.

HORSE SKELETON – CAN YOU LABEL THE PARTS?

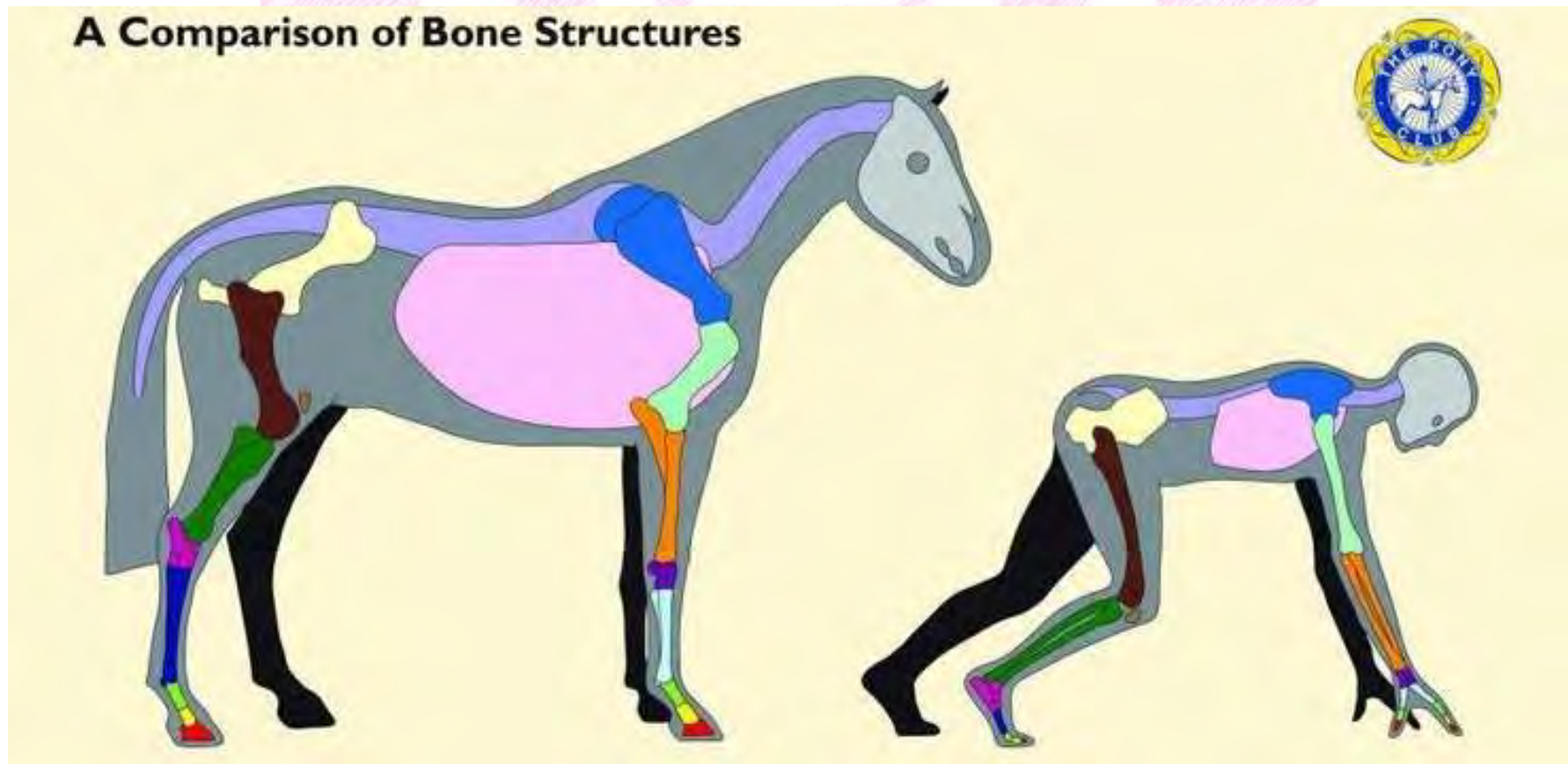


Can you label the skeleton with the following bones:

Ribs	Pelvis	Humerus
Cervical vertebrae		Scapula
Thoracic vertebrae		Ulna & radius
Lumbar vertebrae		Carpal bones
Femur	Patella	Tibia & fibula
Sacral vertebrae		Sternum
Coccygeal vertebrae		Os calsis
Metatarsals	Tarsal bones	
Metacarpals (cannon bones)		
Phalanges (long and short pasterns and pedal bone)		

SKELETON QUESTIONS

1. How many more pairs of ribs does a horse have than a human? **6 pairs more. Horse = 18 pairs. Human = 12 pairs**
2. What bone does a human have that is not present anywhere in the horse? **Clavicle (collarbone)**
3. What is the job of the ribcage? **To protect the organs underneath – the heart and lungs and to aid breathing.**
4. The wrist joint in the human is commonly called what in the horse? **It is the carpal bones, often called the horses knee.**



Task 2: Sequence of feet in the horse's paces

Find some videos on YouTube, watch these and use the pictures to write in the correct sequence of when the horses feet hit the ground. This may be a good start... <https://www.youtube.com/watch?v=T3Bmw76rlfo>

WALK

Watch some videos of horses in walk to help you with this activity. Slow motion ones are even better!



Can you write in the correct sequence of footfalls for the walk?

Right hind, right fore, left hind, left fore



How many beats does the walk have?

Four

TROT

Watch some videos of horses in trot to help you with this activity. Slow motion ones are even better!



Can you write in the correct sequence of footfalls for the trot?

Left hind and right fore together, right hind and left fore together – diagonal pairs

How many beats does the trot have?

Two

CANTER

Watch some videos of horses in canter to help you with this activity. Slow motion ones are even better!



Can you write in the correct sequence of footfalls for the canter?

Left hind, right hind and left fore together, right fore

How many beats does the canter have?

Three

Which canter lead is this horse on?

Right lead

GALLOP

Watch some videos of horses in gallop to help you with this activity. Slow motion ones are even better!



Can you write in the correct sequence of footfalls for the gallop?

Right hind, left hind, right fore, left fore

How many beats does the gallop have?

Four


Land & Wildlife










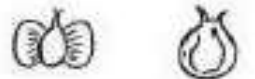





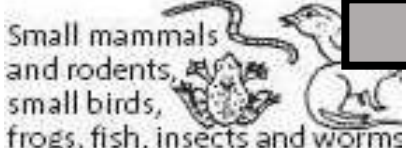





Land and Wildlife Activity: Adaptations and Biodiversity

Task 1: Cut out the 'what they eat' cards bird food sources and jumble them up.

Try and match the bird and beak type with its food source, consider these questions:

1. How are the bird beaks the same?
2. How are the bird beaks different?
3. How do the beaks help them to catch their preferred food?

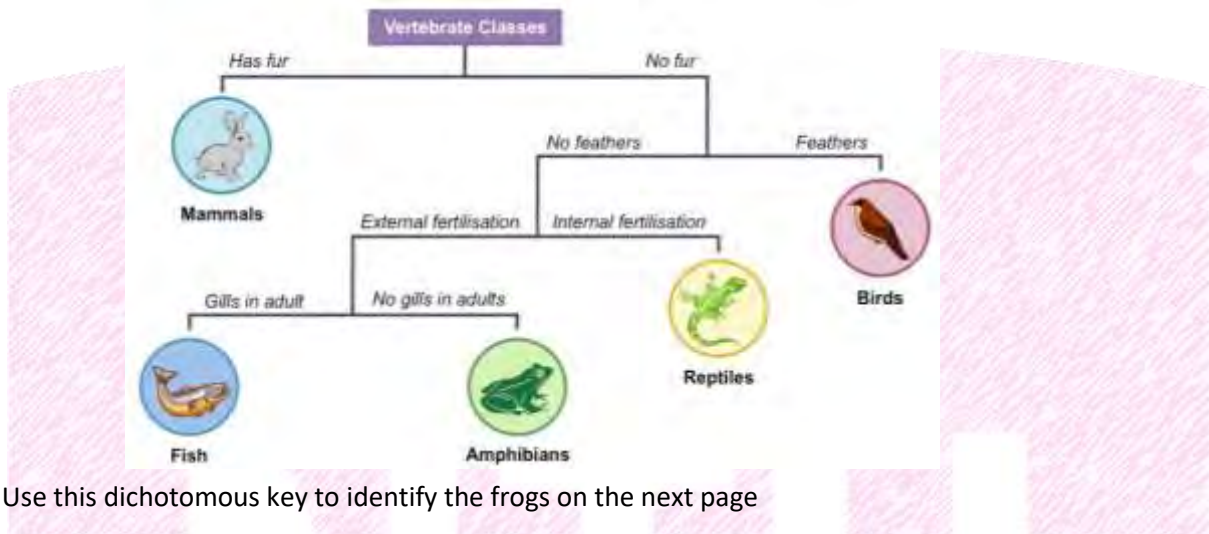


What they eat	Bird	Bill/Beak
 Small birds	 Hawfinch	 Large, strong bill
 Seeds (such as hornbeam), shoots and fruits	 Tree creeper	 Small, curved and pointed
 Worms, snail or fruit	 Sparrowhawk	 Large, sharp and pointed
 Birch and alder seeds	 Thrush	 Medium, generalised shape
 Insects under tree bark	 Nightingale	 Small, pointed bill
 Small mammals and rodents, small birds, frogs, fish, insects and worms	 Lesser redpoll	 Small, strong bill
 Insects	 Tawny owl	 Large, pointed strong bill

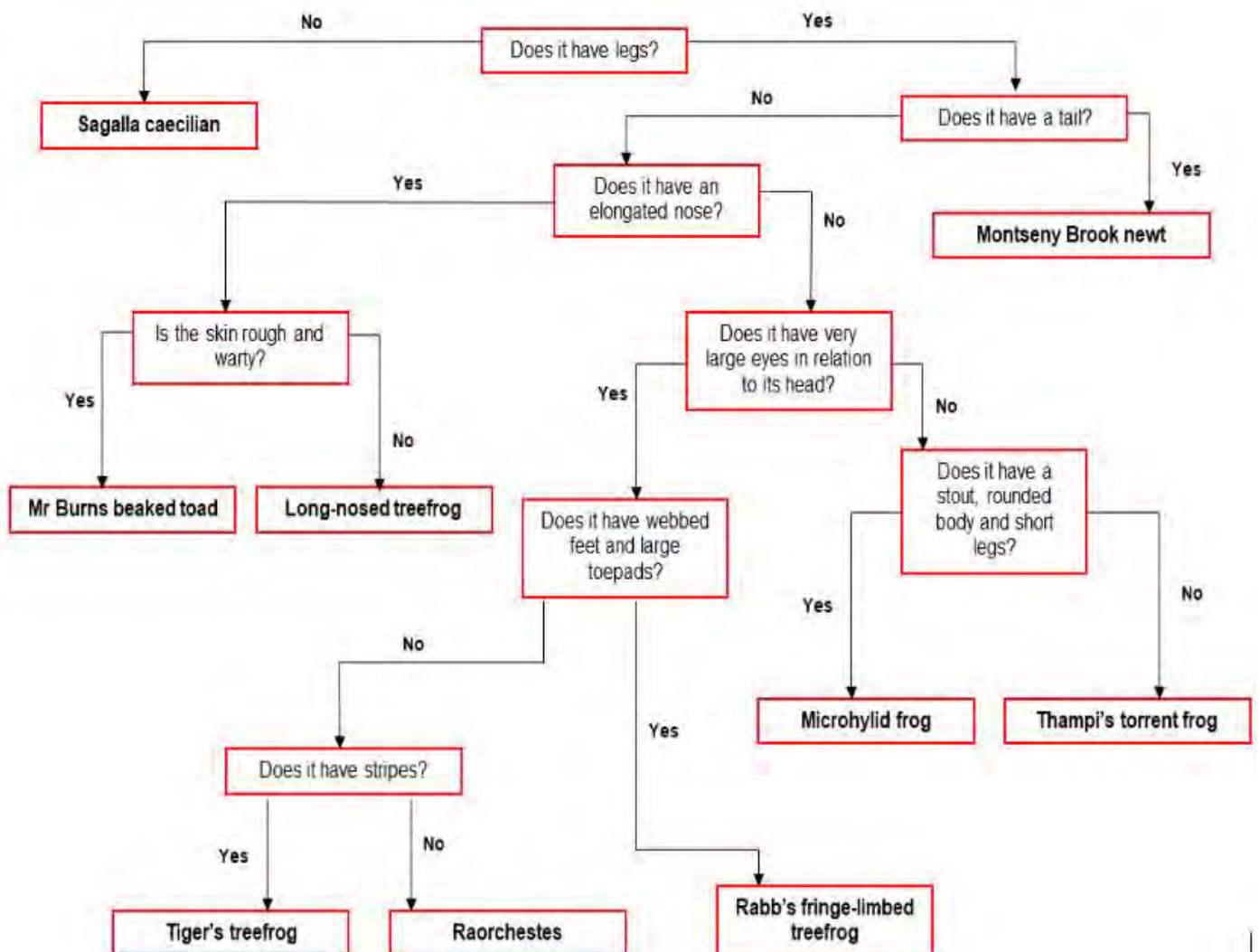
Land and Wildlife Activity

Task 2: Dichotomous Keys

- A **dichotomous key** is a tool that allows you to determine the identity of a species.
- **Keys** consist of a series of choices that lead the user to the correct name.



Task 1: Use this dichotomous key to identify the frogs on the next page





1. Tiger's Treefrog



2. Long-nosed treefrog



3. Rabb's fringe-limbed treefrog



4. Microhylid Frog



5. Montseny Brook Newt



6. Sagala Caecilian



7. Thampi's Torrent Frog



8. Mr Burns Beaked Toad



9. Raorchestes

Extra Challenge: Make your own dichotomous key for the common British butterflies on the next page.

Step 1: List down the characteristics that you can notice. They must be observable in the pictures.

Step 2: Organize the characteristics in order with the most general characteristics first, before moving to the more specific ones. They should get more and more specific as you go down the list.

Step 3: Divide the specimens using statements (i.e. has feathers and no feathers) or questions (does it have feathers?) divide your specimens into two groups. The first differentiation should be made on the most general characteristic.

Step 4: Divide the specimen even further. Continue to subdivide your specimen by asking enough questions until you have identified and named all of them.

Step 5: Draw a dichotomous key diagram. It can be a tree diagram or a flowchart.

Step 6: Test it out



Red admiral



Brimstone



Comma



Small tortoiseshell



Orange-tip



Peacock



Holly blue



Painted lady

Land and Wildlife Activity 3: Garden Bird Bingo

Garden birds are any species of bird that visit our gardens for food and shelter on a regular basis. Every garden attracts a different set of birds depending on the plants, trees and shrubs present, whether extra food is provided, what water sources there are, and what the surrounding habitats are like.

Get out those bird ID books or have a look on the internet, it's time to go head to head with a member of your family or a friend at school and play garden bird bingo!


Over your breakfast chose a window and go spot your garden birds. Once you have a full line (down or across) you are the winner and get to shout BINGO!

Online resources:

www.rspb.org.uk/birds-and-wildlife/wildlife-guides/identify-a-bird/

www.allaboutbirds.org/news/ (Click on 'Get Instant ID help')

Reading Lists



Gold finch	Wood pigeon	House Sparrow	Magpie	Common Gull
Robin	Jay	Dunnock	Crow	Blue Tit
Song Thrush	Swift	FREE SPACE	Wren	Green Finch
Green Woodpecker	Great Tit	Jackdaw	Collared Dove	Sparrowhawk
Kestrel	Chaffinch	Swallow	Pheasant	Tree Sparrow

Additional Resources:

Brackenhurst College Course web page: <https://www.ntu.ac.uk/study-and-courses/college-courses>

College Course Guide: https://www.ntu.ac.uk/data/assets/pdf_file/0018/113742/8165_Brack-FE-brochure-2020-web-EDIT.pdf

College Course Application Form: https://www.ntu.ac.uk/data/assets/pdf_file/0025/914614/FE-application-form-2020-EDIT.pdf

FE Course Search: <https://www.ntu.ac.uk/study-and-courses/courses/find-your-course?sort=title&&level-of-study=Further+education>

Schools Liaison Webpage – Brackenhurst resources including FAQs and videos: <https://www.ntu.ac.uk/study-and-courses/college-courses/schools-liaison>

NTU Virtual Tour: <https://virtualtour.ntu.ac.uk/>

NTU Virtual Open Day booking: <https://www.ntu.ac.uk/study-and-courses/open-days/find-an-open-day>

Fees & Funding: <https://www.ntu.ac.uk/study-and-courses/college-courses/fees-and-funding>

Brackenhurst Video: https://www.youtube.com/watch?v=7Wv_AgwupPE

College courses video: <https://www.youtube.com/watch?v=sMAjqENQGFk>

Course Pages:

College Course Search: <https://www.ntu.ac.uk/study-and-courses/courses/find-your-course?level-of-study=Further%20education&year-of-study=2020&sort=title>

Level 2 Diploma Agriculture: <https://www.ntu.ac.uk/study-and-courses/courses/find-your-course/animal-rural-environmental-sciences/fe/202021/agriculture-level-2-diploma>

Level 3 Extended Diploma Agriculture: <https://www.ntu.ac.uk/study-and-courses/courses/find-your-course/animal-rural-environmental-sciences/fe/202021/agriculture>

Level 2 Diploma Animal Care: <https://www.ntu.ac.uk/study-and-courses/courses/find-your-course/animal-rural-environmental-sciences/fe/202021/animal-care>

Level 3 Extended Diploma Animal Management: <https://www.ntu.ac.uk/study-and-courses/courses/find-your-course/animal-rural-environmental-sciences/fe/202021/animal-management>

Access to Higher Education Diploma in Land-based Studies – Animal Science: <https://www.ntu.ac.uk/study-and-courses/courses/find-your-course/animal-rural-environmental-sciences/fe/202021/access-to-higher-education-diploma-in-land-based-studies-animal-science>

Level 3 Extended Diploma Equine Management: <https://www.ntu.ac.uk/study-and-courses/courses/find-your-course/animal-rural-environmental-sciences/fe/202021/horse-management>

Level 3 Extended Diploma Land & Wildlife (Wildlife Conservation): <https://www.ntu.ac.uk/study-and-courses/courses/find-your-course/animal-rural-environmental-sciences/fe/202021/land-and-wildlife-management>

Contact Us:

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