Directions:
Fill in the blanks.

**Introduction to Disease Segment**

1. **Disease**
   - Is a disorder or incorrect *function* of an organ, structure or *system* of an animal’s body

2. **Disease**
   - Is transmitted from infected animals to *susceptible* animals through the following methods:
     - direct contact
     - indirect contact
     - *droplet* contact
     - airborne transmission
     - fecal-oral transmission
     - vector-borne transmission

3. **Direct Contact**
   - Occurs when an *infected* animal has direct contact with a susceptible animal
   - Examples include:
     – touching an infected animal
     – sexual contact
     – contact with oral *secretions*
     – contact with body lesions

4. **Indirect Contact**
   - Occurs when an animal comes in contact with a *contaminated* surface
   - Examples include:
     – sharing feed or water bowls with *infected* animals
     – touching other contaminated surfaces

5. **Droplet Contact**
   - Occurs when droplets containing *microorganisms* come in contact with the eyes, nose or mouth
   - Examples include:
     – infected animals *coughing* or sneezing onto susceptible animals
6. Airborne Transmission
- Occurs when droplets are evaporated or dust particles which contain microorganisms are in the air
- Examples include:
  - animals ingesting or breathing in microorganisms into their respiratory tract

7. Fecal-Oral Transmission
- Occurs when microorganisms enter the body through ingestion of contaminated food or water
- Examples include:
  - animals eating contaminated food or water

8. Vector-Borne Transmission
- Occurs when vectors, animals or insects, transfer the disease to other susceptible animals
- Examples include:
  - flies, mites and ticks transfer disease through biting susceptible animals
  - rats spread disease through feces which are then accidentally ingested by susceptible animals

9. Zoonotic Diseases
- Can be passed between animals and humans
- Can be caused by viruses, bacteria, parasites and fungi
- Are transmitted by coming in contact with body fluids, being bitten by a tick or mosquito or eating or drinking something unsafe

10. Immunity
- Is an animal’s ability to protect and defend their body from infection, disease or other unwanted or foreign organisms and objects
- Includes the following processes:
  - passive immunity
  - active immunity
11. Passive Immunity
- Is an immunity which occurs due to the injection of antibodies from outside the body to fight an infection or disease
- Is short term and not permanent

12. Active Immunity
- Is an immunity in which the animal’s body produces its own antibodies to fight of infection or disease
- Is long term and permanent

13. Disease
- Can be caused by the following:
  - nutrient deficiencies
  - pathogens
  - genetics

14. Nutrient Deficiencies
- Result from under consumption of key nutrients
- Can affect the internal processes of animals
- Lower an animal’s immune system and increase chances of illness

15. Nutritional Requirements
- Depend on an animal’s age and function
- Allow animals to receive a well-balanced diet
- Include:
  - vitamins
  - fats
  - carbohydrates
  - protein
  - minerals

16. Pathogens
- Are any organism causing a disease
- Can be microscopic or macroscopic

Clinic Corner: Microscopic is defined as an organism too small to be seen by the unaided eye, but large enough to be studied under a microscope. Macroscopic is defined as an organism large enough to be perceived or examined by the unaided eye such as a worm or tick.
17. Pathogens
- Are classified as follows:
  - viruses
  - bacteria
  - parasites
  - fungi
  - protozoa

18. Pathogens

19. Viruses
- Cannot reproduce without a host
- Consist of DNA or RNA
- Can take over the functions of the host cell

20. Bacteria
- Are single celled organisms
- May produce toxins harmful to the body
- Multiply rapidly without a host
- Can be identified by shape

21. Parasite Shapes
- Include:
  - cocci: spherical-shaped
  - bacilli: rod-shaped
  - spirilli: spiral-shaped
22. Parasites
- Can be **external** or internal
- Effect host animals through contact or ingestion
- Have various life **cycles**
- Are living organisms

23. Internal Parasites Life Cycle

24. External Parasites Life Cycle
25. Fungi
• Studies are known as **mycology**
• Live in air, soil, plants and water
• Produce transmittable spores which can cause **fungal** diseases

Clinic Corner: Mycology is defined as the study of the characteristics of fungi.

26. Protozoa
• Is Greek for first animal
• Is a single-celled **organism**
• Breath, move and reproduce similar to multi-cellular animals
• Can be **classified** into many different types

27. Genetics
• Is the study of heredity, which is a process where parents pass genes onto their **offspring**
• Causes parents to pass DNA mutations to their offspring which often leads to **transmission** of disease

28. Prevention
• Starts with proper management and **care**
• Reduces chance of **disease**
• Results in a healthy animals

29. Proper Management
• Allows animal owners to prevent causes, prevent symptoms and treat diseases
• Involves the following techniques:
  – providing **shelter**
  – cleaning and sanitizing
  – providing a good diet
  – monitoring **health daily**
  – isolating new animals
30. Signs of Healthy Animals
- Include the following:
  - alertness
  - normal feces and urine
  - normal vital signs
  - sleek coat
  - eating and drinking normally

31. Signs of Unhealthy Animals
- Include the following:
  - lethargic
  - rough hair coat
  - dull eyes
  - abnormal feces or urine
  - elevated vital signs
  - labored breathing or coughing
  - loss of appetite
  - runny nose
  - swelling

32. Vital Signs
- Refers to the temperature, respiration rate and pulse of the body
- Provide critical information about an animal's state of health and can be used to not only detect but also monitor medical issues, such as diseases

33. Temperature
- Is defined as the degree of heat of a living body
- Is considered a fever when it is elevated or above normal or considered hypothermic when it is below normal
- Is measured in degrees Fahrenheit in the U.S.
34. Respiration
- Is the act of breathing and is determined through the following examinations:
  - rate
    • number of inspirations per minute
  - depth
    • intensity or indication of strain
  - rhythm
    • change in duration of inspiration and expiration
  - sound
    • absence of noise
  - dyspnea
    • labored breathing

35. Pulse Rate
- Is the measurement of the heart rate or the number of times the heart beats per minute
- Is determined through the following examinations:
  - frequency
    • number of beats per minute
  - rhythm
    • regular repeated pattern of beats
  - quality
    • tension on the arterial wall and volume of blood flow

36. Animal Body Systems
- Are complex structures made up of millions of cells
- Each work together to carry out a special job
- Are highly affected by pathogens which disrupt normal cell functions while sometimes resulting in killing cells and tissues
37. Animal Body Systems
   • Include:
     – circulatory
     – respiratory
     – digestive
     – endocrine
     – immune
     – integumentary
     – nervous
     – skeletal
     – reproductive

38. Circulatory System
   • Is designed to pump and deliver blood to the body’s tissues
   • Is made up of the heart, arteries, veins and blood
   • Is affected through disease by changes to blood levels, abnormal heart sounds and beats, fluid around the heart and anemia

39. Circulatory System
   ![HEART AND BLOOD VESSELS](image)

40. Respiratory System
   • Is made up of the nose, mouth, trachea, bronchi and lungs
   • Provides the body with the exchange of oxygen and carbon dioxide
   • Is affected by disease through coughing, damage to the lungs and labored breathing
41. Respiratory System

42. Digestive System
  • Breaks down food into simple **substances** which can be absorbed by the body
  • Absorbs digested parts of food into the blood stream
  • Is affected by disease through diarrhea, weight loss, **intestinal** damage and poor appetite

43. Digestive System
  • Includes four basic types of systems:
    – **monogastric** (simple)
    – ruminant (polygastric)
    – hindgut-fermenter
    – **avian**

44. Monogastric Digestive System
  • Contains a **single-chambered** stomach
  • Stomach is very muscular and stores ingested food and moves it into the **small** intestine
  • Is found in humans, swine, dogs and cats
45. Monogastric Digestive System

- Also known as polygastric
- Contains one large stomach which is divided into four compartments
  - Including:
    - rumen
    - reticulum
    - omasum
    - abomasum
- Is found in cattle, sheep and goats

46. Ruminant Digestive System
48. Hindgut-Fermenter Digestive System
   - Is found in animals who eat large amounts of **roughage**
   - Is similar to ruminants, however does not have stomachs with several compartments
   - Is found in horses, rabbits, **guinea pigs** and hamsters

49. Hindgut-Fermenter Digestive System

50. Avian Digestive System
   - Highly differs from the previous digestive systems because the bird has no teeth
   - Is made up of the **esophagus** which empties directly into the crop, where the food is stored and then grinded by the **gizzard** with stones or grit
   - Is a very fast process

51. Avian Digestive System
52. Endocrine System
- Produces hormones which regulate metabolism, growth and development, tissue and sexual function, reproduction, sleep and mood
- Is made up of the pituitary gland, thyroid gland, parathyroid glands, adrenal glands, pancreas, ovaries and testicles
- Is affected by disease through poorly developed or swollen glands

53. Endocrine System

54. Immune System
- Defends the body against infectious organisms and other invaders
- Attacks organisms and substances which invade an animal’s system and causes diseases
- Is made up of lymph nodes, cells, proteins, tissues and organs
- Is affected by disease through reduced immune response
56. Integumentary System
- Protects the animal’s body from disease by providing a **barrier** to viruses and bacteria
- Protects the body from dehydration, overheating or freezing
- Is affected by disease through **irritation**, itching, scratching, rough hair coat, hair falling out, crusty skin and lesions

57. Integumentary System
- Is the largest organ in the body and includes the following:
  - hair
  - feathers
  - scales
  - nails
  - **hooves**
  - horns
  - skin

58. Integumentary System

59. Nervous System
- Transmits signals to different parts of the animal’s body and operates basic body functions like **breathing** and digestion
- Is affected by disease through poor coordination, tremors, **convulsions** and changes to behavior

60. Nervous System
- Includes:
  - central **nervous** system
Common Diseases of Small Animals

- Teacher Notes

• which is the brain and spinal cord

- peripheral nervous system

• which is made up of the nerves and ganglia
61. Nervous System

62. Skeletal System
- Protects and supports the body tissues and internal organs
- Is made up of bones and other connective tissues
- Is affected by disease through poor growth, muscle weakness, stiffness, lameness and muscle tremors

63. Skeletal System

64. Reproductive System
- Is a system of sex organs within animals which work together for the purpose of sexual reproduction
- Is affected by disease through lowered fertility rates, lactation problems and reproductive unsoundness
65. Reproductive System
- Female anatomy includes:
  - ovaries
  - uterus
  - vagina
  - vulva
  - utter
- Male anatomy includes:
  - penis
  - testes

66. Male Reproductive System

67. Female Reproductive System
Diseases in Dogs Segment

1. Common Dog Diseases
   - Include:
     - heart disease
     - heartworm disease
     - canine distemper
     - canine parvovirus
     - kennel cough
     - lyme disease

2. Canine Heart Disease
   - Can be present at birth or acquired
   - Normally develops during middle age
   - Causes heart failure
     - results from the heart’s inability to pump blood at a rate required to meet the body’s needs

3. Canine Heart Disease
   - Symptoms include:
     - early stages have no visible signs
     - heart enlargement
     - coughing
     - difficulty breathing
     - loss of appetite

4. Canine Heart Disease
   - Treatment includes:
     - there is no cure, but medications can be provided by your veterinarian to treat the symptoms
   - Prevention includes:
     - regular check-ups
     - moderate exercise
     - balanced diet
5. Heartworms
• Can affect any dog whether it is an indoor or outdoor pet
• Occurs when an infected female mosquito bites a dog and the larvae migrate through the tissues and eventually into a dog’s heart
• When mature are from six to 14 inches long

6. Heartworms
• Symptoms may not be visible until later stages of infection
• Symptoms include:
  – dull coat
  – lack of energy
  – coughing and difficulty breathing
  – enlarged abdomen

7. Heartworms
• Treatment can be dangerous, expensive and includes the following:
  – involves a series of injections
  – no vigorous activity
  – large amounts of rest
  – preventive medication given once heartworms are eliminated

8. Heartworms
• Prevention includes:
  – once-a-month heart worm oral medication year round
  – testing for heartworms at least once a year

9. Canine Distemper
• Is a virus
• Damages a dog’s nervous system
• Is highly contagious
• Is transmitted by contact with infected urine, fecal material or saliva
10. **Canine Distemper**
   - Symptoms can be mild to extreme and include the following:
     - constant squinting
     - **congestion** of the eyes
     - pus discharge from the eyes and nose
     - **weight** loss
     - vomiting

11. **Canine Distemper**
   - Treatment includes:
     - there is no cure, but medications can be given to treat **symptoms**
   - Prevention includes:
     - **vaccination** is the best method
       - should occur when dogs receive early shots
     - isolation of sick dogs away from non-infected dogs

12. **Canine Parvovirus (CPV)**
   - Is also called Parvo
   - Is a viral disease which attacks the intestinal tract, **white** blood cells and the heart
   - Is spread by dog-to-dog contact
     - fecal material of infected dogs can be carried on the hair and feet of dog, **contaminated** cages or shoes
   - Is less likely to occur in single dog homes

13. **Canine Parvovirus (CPV)**
   - Symptoms include:
     - **depression**
     - loss of appetite
     - vomiting
     - **diarrhea**
     - fecal discoloration
     - blood in feces
14. Canine Parvovirus (CPV)
• Treatment includes:
  – combat dehydration with water and electrolytes
  – antibiotics given in the form of a shot or IV
  – rest

15. Canine Parvovirus (CPV)
• Prevention includes:
  – vaccination
  – booster vaccinations
  – proper cleaning of kennels
  – keeping dogs away from fecal waste of other dogs

16. Kennel Cough
• Is formally known as canine bordetellosis or bordetella
• Is caused by the bacteria Bordetella bronchiseptica
• Causes a severe chronic cough
• Is transmitted by contact with the nasal secretions of infected dogs

17. Kennel Cough
• Symptoms include:
  – dry hacking cough followed by gagging
  – watery nasal discharge
  – lethargic
  – fever
  – pneumonia

18. Kennel Cough
• Treatment includes:
  – for mild cases, let the disease run its course with a cough suppressant being administered
  – for severe cases, antibiotics are administered, water should be kept available at all times

19. Kennel Cough
• Prevention includes:
  – avoid contact with other dogs, especially puppies
  – vaccinate
Common Diseases of Small Animals
- Teacher Notes

20. Lyme Disease
- Is a bacterial infectious disease syndrome
- Is spread primarily by ticks
- Symptoms can last months after the disease has been treated

21. Lyme Disease
- Symptoms include:
  - fever
  - loss of appetite
  - acute lameness
  - arthritis
  - weight loss

22. Lyme Disease
- Treatment includes:
  - administering antibiotics
  - giving pain relievers
  - is a long process
- Prevention includes:
  - avoiding ticks
  - applying tick dips
  - vaccinations

Disease in Cats Segment
1. Common Cat Diseases
- Include:
  - heartworm disease
  - feline panleukopenia
  - feline leukemia virus
  - feline respiratory disease

2. Heartworms
- Can affect any cat whether it is an indoor or outdoor pet
- Occurs when an infected female mosquito bites a cat and the larvae migrate through the tissues and eventually into a cat’s heart
- Can also reside in the pulmonary arteries
- When mature are from nine to 11 inches long
3. Heartworms
   • Symptoms may not be visible until later stages of infection
   • Symptoms include:
     – dull coat
     – lack of energy
     – coughing and difficulty breathing
     – enlarged abdomen
     – convulsions
     – sudden death

4. Heartworms
   • Treatment includes:
     – there are no approved treatments for cats
     – can use some dog treatments, but there are some side effects which can cause pulmonary failure
     – treat the symptoms of heart worms and hope the cat outlives the worms

5. Heartworms
   • Prevention includes:
     – once-a-month heart worm oral medication year round
     – testing for heartworms at least once a year

6. Feline Panleukopenia
   • Is also called feline distemper
   • Is a highly contagious viral disease
   • Usually occurs in groups of cats
   • Is passed from cat-to-cat by direct contact or by fecal waste from infected cats
   • Destroys a cat’s cells making them more susceptible to other diseases and infections
   • Has a very high mortality rate
7. Feline Panleukopenia
   • Symptoms include:
     - loss of **appetite**
     - depression
     - high fever
     - lethargy
     - **vomiting**
     - dehydration

8. Feline Panleukopenia
   • Treatment includes:
     - if reached is limited to supportive **therapy**
     - there are no antibiotics
     - try to combat **dehydration** and malnutrition
     - strict isolation
     - constant attention

9. Feline Panleukopenia
   • Prevention includes:
     - some cats will have immunity due to a **survived** mild case or have received the **immunity** from their mother
     - vaccinations

10. Feline Leukemia Virus
    • Is a fatal **retrovirus** affecting the cat’s immune system
    • Increases the cat’s susceptibility to other disease
    • Can be spread by contaminated nasal secretions, infected urine, feces and milk
    • Does not survive for long **outside** of a cat’s body
11. Feline Leukemia Virus
- Symptoms include:
  - weight loss
  - recurring **chronic** illness
  - lethargy
  - fever
  - diarrhea
  - erratic **breathing** patterns
  - yellow color around the mouth

12. Feline Leukemia
- Treatment includes:
  - there is no cure
  - confine cat to prevent exposure to **non-infected** cats
  - feed nutritionally balanced diets
  - avoid feeding raw foods
  - schedule check-ups for cat
- Prevention includes:
  - **avoidance** of infected cats
  - vaccination

13. Feline Respiratory Diseases
- Include the following:
  - feline viral rhinotracheitis
  - feline calicivirus
  - feline **pneumonitis**
- Are highly contagious
- Are transmitted from cat-to-cat through direct contact, through the air by sneezing or **coughing** or by humans if they have been close to infected cats
14. Feline Respiratory Diseases
- Symptoms include:
  - runny nose
  - **sneezing**
  - coughing
  - lethargy
  - fever
  - loss of **appetite**

15. Feline Respiratory Diseases
- Treatment includes:
  - administering antibiotics
  - ensuring food and water intake
  - rest
- Prevention includes:
  - vaccination
  - **avoidance** of infected animals

**Disease in Birds Segment**

1. Common Bird Diseases
- Include the following:
  - psittacine beak and feather disease
  - **pacheco’s** disease
  - polyoma virus
  - psittacine wasting disease
  - bacterial infections
  - aspergillosis

2. Psittacine Beak & Feather Disease
- Is a highly contagious viral infection
- Is mainly found in cockatoos, but is potentially contagious to all **psittacine** birds
- Is an airborne virus normally spread in bird nurseries, pet shops, bird fairs and when birds are brought together in **stressful** conditions
- Attacks the beak and feathers of birds as well as decreases the efficiency of the immune system
3. Psittacine Beak & Feather Disease
• Symptoms include:
  – irreversible loss of feathers
  – shedding of developing feathers
  – abnormal feather development
  – loss of powder down
  – abnormal beak with lesions
  – weight loss

4. Psittacine Beak & Feather Disease
• Treatment includes:
  – there is no treatment available at this time
• Prevention includes:
  – there is no vaccine available at this time
  – strict isolation of diseased birds to inhibit the spread of the disease
  – DNA testing of birds
  – keep facilities clean

5. Pacheco’s Disease
• Is caused by a herpes virus which attacks the liver
• Results in liver failure and eventually death
• Is spread through infected feces and nasal discharge
• Is very stable outside the host body so it can contaminate the air, surfaces, food and water aiding in the spread of the disease

6. Pacheco’s Disease
• Symptoms include:
  – lethargy
  – diarrhea
  – ruffled feathers
  – weight loss
  – eye infections
  – tremors in the neck, wings and legs
7. Pacheco’s Disease
- Treatment includes:
  - is limited to **supportive** care
  - treat with antibiotics to minimize the spread of the virus
  - acyclovir, an antiviral **medication**, is helpful on decreasing the mortality of the disease

8. Pacheco’s Disease
- Prevention includes:
  - **vaccination** and yearly boosters
  - quarantine and test new birds
  - isolate any bird which could be **shedding** the virus
  - disinfect all surfaces with bleach

9. Polyoma Virus
- Is a virus also known as Budgerigar Fledgling Disease
- Is one of the most significant **threats** to caged birds
- Infects almost all parrot species
- Is most lethal to young birds
- Is spread through feather dust, aerosols, **parental** feeding of chicks, direct contact with infected environments and carrier birds

10. Polyoma Virus
- Symptoms include:
  - swollen **abdomen**
  - depression
  - loss of appetite
  - weight loss
  - **regurgitation**
  - diarrhea
  - dehydration
  - tremors
  - paralysis
11. Polyoma Virus
- Treatment includes:
  - no treatment is available at this time
- Prevention includes:
  - vaccination of all birds
  - quarantine new birds
  - disinfect all surfaces the bird comes in contact with using bleach

12. Bacterial Infections
- Often occur when the bird is stressed, suffers from poor nutrition, inadequate care or the bacterial population overwhelms the bird’s immune system
- Can be given to birds by humans
- Can cause organ damage and even death
- Include:
  - upper respiratory infections
  - urinary tract infections
  - intestinal infections

13. Upper Respiratory Infections
- Symptoms include:
  - sneezing
  - nasal discharge
  - inflamed eyes
  - swelling of the head

14. Upper Respiratory Infections
- Treatment includes:
  - administration of an oral antibiotic
  - eye or nasal drops
  - increased fluid intake
- Prevention includes:
  - reduce stress of the bird
  - feed a balanced diet
  - keep areas where the bird will be clean
15. Intestinal Infections
   • Symptoms include:
     – loss of **appetite**
     – vomiting
     – **diarrhea**
     – depression

16. Intestinal Infections
   • Treatment includes:
     – administering an antibiotic
     – supportive therapy
     – **incubation**
     – tube feeding
   • Prevention includes:
     – check food for **spoilage**
     – keep water and cage clean
     – do not feed birds from your mouth

17. Aspergillosis
   • Is a fungal infection
   • Is caused by an endotoxin which is produced by the **fungus**
   • Is considered to be opportunistic as it mainly occurs in birds with a
     suppressed immune system
   • Can be caused by **malnutrition**, inadequate housing and
     contaminated feed
   • Is grown in the air sacs of a bird’s upper respiratory system

18. Aspergillosis
   • Symptoms include:
     – respiratory distress
     – voice changes
     – **abnormal** feces
     – regurgitation
     – poor appetite
     – **lesions** in the lungs, air sacs and trachea
19. Aspergillosis

- Treatment includes:
  - antifungal treatments
  - immune stimulants
  - surgery (if needed)
- Prevention includes:
  - minimize stress and overcrowding
  - provide proper ventilation
  - feed a proper diet

Disease in Rabbits Segment

1. Common Rabbit Diseases

- Include the following:
  - snuffles
  - heat stroke
  - wryneck

2. Snuffles

- Is a bacterial infection caused by the bacterial organism Pasteurella
- Bacteria resides in the nose, lungs and eye membranes

3. Snuffles

- Is a respiratory disease, but may also include ear infections, pneumonia, heart problems, abscesses, eye problems and septicemia
- Is spread among chronically infected animals and their litters or between breeding males and females

4. Snuffles

- Symptoms include:
  - sneezing
  - runny nose
  - stained yellow nose and paws from the mucus
  - matted eyes
5. Snuffles
• Treatment includes:
  – administer antibiotics to treat clinical signs
  – bacteria will never be completely removed from an infected rabbit, so relapsing can occur which will require additional treatment

6. Snuffles
• Prevention includes:
  – test new rabbits prior to exposure with other rabbits
  – quarantine new rabbits
  – sanitize areas where the rabbit will be located
  – decrease stress
  – provide proper food, water and housing

7. Heat Stress
• Is the common cause of heat strokes in rabbits
• Is extremely likely to occur in overweight or heavily furred rabbits, when the environmental temperature is above 85°F (29°C) and high humidity

8. Heat Stress
• Symptoms include:
  – panting
  – salivation
  – ear reddening
  – weakness
  – delirium
  – convulsions

9. Heat Stress
• Treatment includes:
  – lower body temperature
    • spray or bathe rabbits with cool water
    • apply cold running water to ear flaps
  – increase fluids
10. Heat Stress
• Prevention includes:
  – provide adequate shade from the sun, proper ventilation
  – continuous mist or spray of water
  – have a fan in the area of the rabbit to keep it cool

11. Wryneck
• Is a severe twisting of the head which causes coordination problems and sometimes total incapacitation
• Is most often a result of a bacterial infection of the inner ear
• Can also be caused by ear mites, cancer or nutritional imbalances

12. Wryneck
• Symptoms include:
  – rabbit’s head is often turned to one side
  – recent ear infection
  – uncoordination
  – shaking head
  – lethargic
  – loss of appetite

13. Wryneck
• Treatment is dependent upon the cause, includes the following:
  – if caused by ear infection, an antibiotic is used
  – if caused by ear mites, the mites should be removed with an approved pesticide
  – if caused by a nutritional imbalance, the imbalance should be identified and corrected through the use of supplements

14. Wryneck
• Prevention includes:
  – keep rabbit’s ears clean
  – feed a balanced diet
Common Diseases of Small Animals
- Teacher Notes

*Disease in Guinea Pigs Segment*

1. Common Guinea Pig Diseases
   - Include the following:
     - scurvy
     - bordetellosis
     - salmonellosis

2. Scurvy
   - Is caused by a [Vitamin C](#) deficiency
   - Causes connective tissue cells to not produce [collagen](#) at a normal rate
   - Causes weak bones which are easily traumatized

3. Scurvy
   - Symptoms include:
     - hemorrhages in the joints and gums
     - loose teeth
     - rough hair coat
     - loss of appetite
     - lameness

4. Scurvy
   - Treatment includes:
     - supplementation with vitamin C by [injection](#) or orally
     - balancing the diet to include more vitamin C
   - Prevention includes:
     - feed a balanced diet which includes plenty of vitamin C to meet the needs of the guinea pig

5. Bordetellosis
   - Is a bacterial infection of the [respiratory](#) system caused by Bordetella bronchiseptica
   - Affects guinea pigs of all ages
   - Is spread from animal to animal through direct contact
   - Is carried by guinea pigs who have had the [disease](#) and survived
6. Bordetellosis
   • Symptoms include:
     – abnormal breathing patterns
     – nasal discharge
     – loss of appetite
     – weight loss

7. Bordetellosis
   • Treatment includes:
     – is often unsuccessful
     – antibiotics can be given to ease symptoms
   • Prevention includes:
     – vaccination

8. Salmonellosis
   • Is a bacterial infection
   • Is transmitted by ingesting contaminated food, water, bedding or feces
   • Can be spread by animal’s who have survived the disease and are now carriers
   • Bacteria can enter the guinea pig’s system through the eyes

9. Salmonellosis
   • Symptoms include:
     – depression
     – lethargy
     – anorexia
     – weight loss
     – rough hair coat
     – eye infections

10. Salmonellosis
    • Treatment includes:
        – administer antibiotics to treat symptoms
    • Prevention includes:
        – quarantine new animals
        – keep housing clean
        – always feed clean food and keep water clean
Common Diseases of Small Animals
- Teacher Notes

Disease in Hamsters Segment
1. Common Hamster Diseases
   • Include the following:
     – wet tail
     – cancer
     – bladder stones

2. Wet Tail
   • Is also known as proliferative ileitis
   • Is a serious bacterial intestinal disease
   • Is an extremely contagious disease

3. Wet Tail
   • Symptoms include:
     – lethargy
     – hunched posture
     – extreme diarrhea
     – rectal prolapse

4. Wet Tail
   • Treatment includes:
     – fluid replacement therapy
     – oral anti-diarrheal medication
     – antibiotics
     – is often not successful
   • Prevention includes:
     – sanitize cage often
     – do not breed hamsters which have had wet tail
     – keep the stress level of the hamster low

5. Cancer
   • Is a disease caused by an uncontrolled division of abnormal cells
   • Is extremely common in hamsters
   • Is more likely to affect the female than the male
6. Cancer
   • Symptoms include:
     – tumors or abscesses
     – lethargy
     – loss of appetite

7. Cancer
   • Treatment includes:
     – removal of tumors or abscesses if malignant
     – is very difficult to complete and very expensive
   • Prevention includes:
     – no known method of prevention in hamsters

8. Bladder Stones
   • Are also known as urinary calculi
   • Can occur in all animals, but are very prevalent in hamsters due to their small size

9. Bladder Stones
   • Symptoms include:
     – urinary tract infection
     – trouble urinating
     – increased water consumption

10. Bladder Stones
    • Treatment includes:
        – removing bladder stones
        – administering antibiotics
    • Prevention includes:
        – managing hamster’s diet, but is not practical