What is a pest?

*Any organism that has a negative effect on human health or economics (food)

Use of chemicals to kill large numbers of the pest, short term protection with potential environmental and health consequences?

*Pest control chemical technology.

Ecological pest control?

*Control based on pest life cycle & ecology, control agent may be an organism or a chemical specific to pest, manipulate a part of the ecosystem, with an emphasis on protection from pests.

If you see a white cockroach it means?

*The roach just shed its exoskeleton

Carpenter ants feed on dead and living insects?

*True

Have a stiff overshell (exoskeleton cuticle) composed largely of chitin, a natural carbohydrate polymer? Insects arthropoda (jointed foot)

Many are easy to manage during one or two of their life stages, pesticides may not be effective against eggs or adults, while the soft immature insects larvae or in stars may be easily killed?

*Insect life cycle

3 Stages? egg, nymph, adult (wings become fully developed only in the adult stage? *Gradual, incomplete or simple metamorphosis

4 Stages? egg, larvae, pupa, adult

*Complete metamorphosis.

Grasshoppers, crickets, cockroaches, & cicadas?

*Order Orthoptera

Bees, wasps, hornets?

*Order Hymenoptera

True bugs, (big eyed bugs, plant bugs, assassin bugs?

*Order Hemiptera

Butterflies and moths?

*Order Lepidoptera

House Flies, Mosquitos, Fruit flies, Midges, Gnats?

*Order Diptera

Which spider has a pattern that resembles a violin on its back? *Brown recluse (Fiddle Back Spider)

What is Hantavirus?

*Can be contracted when inhaled while in close proximity to rodent urine & feces

What is the shape of mouse droppings or feces? *'/4 " in length, pellet shaped w/ pointed ends

What should a customer do before service for Bedbugs? *Empty Drawers, clean bed linens, mattress pads & vacuum

When should the follow-up visit occur after initial Bedbug treatment? *14-20 days

What is the most effective chemical treatment for the control of Bedbug populations? *Non-synthetic pyrethroids

What is the typical length of time a Bedbug needs to complete each blood meal? *3-10 minutes

How wide is a Bedbug?

*3/4 millimeter

How long is a Bedbug?
*4-5 millimeter or 3/16ths of an inch

What pest can live for 18 weeks without a blood meal? *flea

What is the minimum temperature to effectively kill Bedbugs? *111 degrees fahrenheit

What should a customer do before service for fleas? *Remove clutter, vacuum, and have pets treated

What is the most common flea found in California? *cat flea

What recommendations should be made to home owner prior to flea treatment? *Sweep and clean all tile and wood floors.

When treating for fleas the standard PSI reading for a hand sprayer is *15 PSI

If a customer is asked to cut down their grass they have... *ticks.

After a flea treatment how soon can a customer vacuum? *When carpet is thoroughly dry.

How do you treat for spiders? *Crack and crevice

What is the best tool for removing webs? *webster

Where do bumble bees nest? *underground

What is the maximum number of eggs a paper wasp can lay in one season? *140

When treating for flies where would place bail and or pesticide? *on resting surfaces where they might land

The most important part of eradicating a store product pest... *Finding and removing the source.

How long does an Indian Meal Moth live? *25-120 days

To which type of fabric/clothing is fabric moth most damaging? *silk

Silverfish are most often in which location?

*Warm, moist sinks and bathtubs / stagnant water because they have gone to drink and can't climb.

Silverfish feed on what? *Glue and paste in bindings

What items do you treat for carpet beetles? *Drapes

What is the best control method for millipedes and/or centipedes? *Sanitation and exclusion

Prefers temperatures 90-106 degrees fahrenheit and primarily eat paper products? *Firebrats

How many separations does the antennae of a drugstore beetle have? *four

How many eggs can a cigarette beetle lay in freshly harvested tobacco? *30-40

What is the order of roaches in size from biggest to smallest?

American

Oriental

German

Brown Banded

The smallest cockroach a pest control Technician will encounter in California is? *The Brown Banded Cockroach

Which roach is the is the largest nuisance in California? *German

How would you treat for German roaches in a senior citizen home? *Bait only

The characteristic of an evenly rounded thorax describes which ant? *Carpenter or Velvety Tree ants

Which ant tends to nest in wall voids? *Pharaoh

A mouse can jump? *12 inches vertically

Mice will range approximately how far from their nest? *20 Feet

A Norway rat can jump? *3 feet vertically

Which rodent listed below is a Commensal (Many Bacteria) rodent. *Norway Rat

What is the average lifespan of a Norway rat? *1-2 years

What is the best way to manage Roof rats in an attic? *snap traps

Which bird is the most effective predator of rodents?

*Owl

For rodent exclusion, what is the minimum distance from the bottom of the door that a kick plate should cover?

*No less than 1 foot and and should fit to the jams and door linings

For rats, how should snap traps should be placed?

*6-10 feetapart with the trigger end towards the wall.

What is the maximum space between the placement of traps when dealing with a severe mouse infestation?

*6 Feet

Non-chemical rodent control methods include?

*Seal all holes and trim back foliage

How often must interior bait stations be checked?

*Weekly

When applying liquid pesticides near a stream, what precaution should you take? *Increase droplet size

A strainer is installed in sprayers to?

*collect debris to prevent particles from causing a loss in pressure

Before applying liquid near an electrical appliance, what should you do?

*Unplug appliances

What gloves should you use when handling pesticides?

*Neoprene Rubber

Which pesticide formulation should be used to avoid visible residues?

*Emulsifiable Concentrates

What is the recommended nozzle pressure for application of pesticides *25-30 PSI

What stage of an insect is the most important/difficult to kill?

*Eggs

Before applying dust to a wall void, what should you determine first?

*If wall is insulated

A dust formulation consists of what?

*A toxicant added to an inert carrier

When using a wettable powder, the applicator should consider what two factors? *The possible residue it may leave behind & continual agitation of the tank

When pouring wettable powder into a tank one must? *Place bag inside tank to avoid dust exposure

What agency identifies endangered plants and animals? *US Fish & Wildlife

For general pest control application of pesticides in an apartment, when must notice to occupants/residents be given? *No later than prior to application

What is the minimum amount of time required for notices of service to be posted at a school or medical facility?

*24 hours prior and 72 hours after

What is the minimum amount of time required for notices of service to be posted when treating a single family home?

*12 hours Prior and 24 hours after

How much is the renewal fee for a Field Representative license? *\$30.00

A registered company which changes the address of its principle branch office must notify the registrar within?
*30 days

How much is the fee for its principal office to change address? *\$25.00

How long must pest control operators maintain copies of pesticide use reports? *4 Years

When was FIFRA (Federal Insecticide, Fungicide and Rodencide Act) amended. *1947

What percent of food is destroyed by pests? *10%

Who is responsible for approval of pesticides? *EPA State & Federal

When was FIFRA reinstated? *1972

When was the Structural Pest Control Board created? *1980

What ingredient is used in non-repellent or termidor? *Fipronil

What does mode of action mean?

*The way in which the pesticide effects the target pest.

What are the four pieces of information required for pest control operation paperwork?

*Date of treatment

Name of owner & address

Description of area treated & target pest

Name of pesticide and applicator

What is section 8538 referred to as in the Business and Professions Code for Structural Pest Control operators?

*Notice to owner and Tenant

What information is on the notification for Section 8538 of the Business & Professions code (B&P code)?

*Pesticide proposed to be used, precautionary statement, & frequency of application.

Under section 8538 of the B&P code how would you post to four units or fewer? *Individually

Under section 8538 of the B&P code how would you post to five or more units? *In a conspicuous general area.

How is chronic exposure defined?

*Several exposures over a period of time

What virus do rodents carry?

*Hantavirus

What does the Hantavirus affect?

*The respiratory system

What is the signal word for Category 1 (Most Toxic) Lethal Dose (LD) 50? *Danger

What is the signal word for Category 2 (Moderately Toxic) LD 51-500? *Warning

What is the signal word for Category 3 (Slightly Toxic) LD 501-5000? *Caution

What fly has a greenish metallic body? *Blow Fly (Bottle Fly)

What is the name for the appendages on a cockroaches body? *Securus

What body systems could pesticides potentially effect? *Endocrine, respiratory & reproductive systems

How many feet is your ladder required to extend above the edge of a roof when in use?

*3 Feet

Scales, whiteflies, mealy bugs, spittle bugs and aphids belong to what order of insects? *Homoptera

Beetles & weevils belong to what order of insects? *Coleoptera

Spiders, mites, ticks, and scorpions all have two body regions, four pairs of legs, are wingless and have no antenne and belong to what order of insects?

*Mites-arachnida

Requires understanding of the growth habits of the plant and its coping system, knowledge of biology, behavior, life history and types of damage caused by potential pests, information on growth stages or environmental conditions?
*Insects & IPM (Integrated Pest Management)

What method of pest control involves manipulating the environment to make it less suitable for pests?

*Cultural Method

What signs would indicate you have a cockroach infestation? *Fecal spotting & smears

What would you ask the customer/client to do in preparation for a Bedbug treatment? *Move all bedding to the middle of the room

What advice would you give to a customer/client, where stored product pests are a concern?

*rotate stock

How long does it take for a Bedbug to digest its food/Meal? *5-10 days

Which bee does not sting? *Drone

What information is required on a service ticket? *Rate of chemical/pest controlled

How would you advice a customer/client to treat for crab lice? *Consult a doctor, lice are a medical issue

What respirator can not be used when spraying oil based products. *N-95

What is a factor that should be considered when spraying furniture? *Direct sunlight

Where or how would you treat in a zoo? *Exclusion inside and out

From what distance should signage be visible from? *25 feet

What fly might you see breeding in a trash can? *House fly

In a commercial kitchen what visible signs might indicate you have rats. *scattered droppings, urine and fresh gnaw marks

What is the best approach should you encounter a damaged pesticide container? *place in an empty container with the same label

When wind is blowing 8 miles an hour and using a power sprayer what should you do? *continue to spray

How would you bait treat for Filter Flies (Moth Fly)? *Place in resting area or where they might land

What are the characteristics of a Black Widow spiders web? *Irregular, tangled, strong/sticky, scaffold (Triangular)

Which pest can be treated for by applying caulking where needed. *Ants

When dealing with a heavy roach infestation, what should be your first step? *Inspect

When do you place out Snap traps? *When they might leave an odor

What do you do after a Roach Treatment? *place sticky pheromone monitoring traps

How often do you check interior traps? *Weekly

How far away from a food source can Insect Light Trap (ILT) be placed? *5 feet

What does a female ant do once she's found a suitable place to colonize? *Detaches/chews off her wings

How long can you Pest Control Technician train in the field without a license? *90 days

What must Pest Control trucks be labeled with? *Signage that reads: Dangerous/Poison storage area

What size wire mesh will exclude the entrance of rats into a structure?

*1/2 Inch

What two departments regulate pesticide laws?

*Environmental Protection Agency (EPA) & Department of Pesticide Regulations (DPR)

What is the average lifespan of a Case Making Moth? *4-6 days

In the event of a serious injury or death related to pesticides we applied, who needs to be notified?

*Structural Pest Control Board

Fleas are found in what areas of the lawn or Grass? *Shaded areas

What is the average length of time a flea treatment will last? *30 days

Where should liquid flea treatment be applied after we perform a flea treatment? *Drapes

Where would you normally find dead flies in a home? *windowsills

When spraying a vacant home for fleas, what should be considered? *Unseen animal that may be harboring in the basement or under home

When performing an Insect Growth Regulator (IGR) treatment for fleas, what stage are we stopping from reproducing?
*adult

What is the hardest life cycle stage or star of flea to control? *Pupa

What color is a flea egg? *pearly white

When using the fan spray technique for fleas, what is the best PSI/*15-25 PSI

What is the best rodent/rat treatment method? *exclution

What is the scientific name for German Cockroaches? *Blatella Germanica

How many eggs does a German Cockroach lay in a lifetime? *8 ootheca with 30-40 embryos each.

Why might treatments fail when treating for cockroaches? *The pest has become resistant

How many eggs will an American Cockroach lay in a lifetime? *9-10 ootheca containing 14-16 embryos each

Which roach is most capable of withstanding cold temperatures? *Oriental Cockroach

One technique in controlling Fruit Flies?
*Discard of overripe produce or place in cold storage

Where do cluster flies breed? Inside Earthworms

Which fly will breed in manure? *House, Bottle & Flesh flies

Which fly can be identified by 4 longitudinal bands running parallel to its body? *House fly

What is the best overall treatment for Bedbugs? *Fumigation

Recommended treatment for spiders? *Apply airiosol directly & web removal

How soon after a Flea treatment can you start the cleaning process? *24 Hours

Pest control companies must keep records for how long? *3 years/36 months

Active larva in a pool or other standing body of water results in? *Mosquitos

What is the characteristic shape of Norway rat droppings? *Capsule

You see a single mouse/rat in the day time. what should your level of concern be? *big problem/much larger problem

Snap traps should be set how far apart and in what maner when placed inside? *6 feet with the trigger sid towards the wall

How often should outside bait stations be checked? *Monthly

What is the life expectancy of a mouse in natural conditions? *1 year

How many babies will a mouse normally have in a litter/year? *Average litter size 6 / 8 litters per year

What are the characteristics of Roof rat droppings? *½ Inch in length in a spindle shape.

What purpose is a black light used for? *Tracking rat urine

What pests do flowering trees and shrubs attract? *Carpet Beetle (almost all dermestids)

What advice could you give a customer/client to aid in keeping beetles out of the home? *trim flowering plants away from structure, ensure tight fitting screens and doors

What type of fly would you see around and over watered plants? *Fungus gnats

What advice could you give to aid in getting rid of Fungus Gnats? *Refrain from overwatering potted plants, allow them to dry out

What technique would you use to treat a paper wasp nest? *Chemically treat with Wasp freeze & and knock down nest when wasps are dead

What is the average lifespan of an Argentine ant? *74 days

How should you treat the outside perimeter of a home for Argentine ants? *barrier treatments with residue insecticides around perimeter of structure

What is the respirator most commonly used by Pest control applicators? *N-95

When you can taste or smell pesticides while spraying pesticides what do you do?

*change the cartridges in your mask

What is the Ideal pressure for compressed air spray equipment? *15-25 PSI

How should you clean the tip of a clogged sprayer? *With a toothpick

What treatment option should be employed at a home where spiders are present in the eves to keep them from returning? *treat with residue spray

What spider hunts its prey? *the Wolf spider

If wearing gloves where might a technician experience exposure? *eyes & mouth

What is the best method to apply granular Baits? *Granular spreader

What areas are granular baits most useful and effective? *Landscaped areas and planter boxes

If you change your address, how many days do you have to notify the Pest Control Board?

*10 days

What method do you use to notify the Pest Control Board of your change of address? *in writing

How many hours of continuing education must you complete to renew a Branch 2 License?

*16 Hours

How must your continuing education hours be allocated in each discipline to renew your Branch two license?

*8 Hours Rules & Regulations

4 Hours Technical skills

2 Hours IPM

2 Hours other

What is the LD 50 Formula:

*MG AL/KG = Milligrams of active ingredient ?kilograms of body weight

What wash cycle must be used to launder pesticide contaminated clothing? *longest cycle with hot water

What gloves are best to use when applying pesticides? *chemical resistant rubber, latex or neoprene.

Where can dust be applied in a structure?

*cracks/crevices & wall voids

Where can dust not be applied? *insulated walls

Pesticides should not be sprayed within how many feet of water? *25

Why or when is it ok to use emulsifiable concentrates?
*always. They will not stain and are the most efficient way to disperse chemicals

What is the the number one mistake in pest control? *failure to properly identify or miss-identification of pest

Which beetle has carrot shaped larva? *Black Carpet beetle

What pest can be found in birds nests and bee hives? *Larder beetle

What is the most useful tool in pest control? *flashlight

What items should be in a spill control kit? *Broom, dustpan, trashbags, absorbent material

What is the Indian Meal moths average life span? *1-2 weeks

What pest builds webs within the food it infests? *Indian meal moth

What pest can be found in dry dog food? *Drugstore Beetle

What do fabric pests or beetles feed on? *clothing items soiled with human sweat

What steps should one take to control fabric pests?
*Dry clean appropriate clothing, properly store & vacuum

How many instars (life cycles) do Bedbugs have. *5

Argentine ants are attracted to? *Odorus ant & Aphid secretions

What pest has segment antenne? *Bedbugs

What is the proper technique for the treatment of carpenter bees? *Inject dust into entrance hole & fill

What ants nest in damp wet soil? *Citronella, Argentine, Cornfield

Yellow Jackets are most active in what season? *summer

In treatment for rodents what steps need to be followed? *identify, eliminate, sanitize, proofing

If ants are found in an ICU ward of a hospital, what technique do we use to treat? *bait no erisols or dust

The toxicity of a of a pesticide is? *its capacity to do harm

What is the result when you mix chemicals with water and air? *foam

What ant makes its nest in moist wood? *Carpenter ant

What ant has a 12 segmented antennae, 3 in club? *pharaoh ant

What is the most overlooked area in a home when treating fleas? *under the homeowners bed

What is the most environmentally safe way to treat for Bedbugs? *Heat

What is another term for anticoagulant? *fibrinolytic

What is the best way to eliminate or treat Bedbugs in a hotel? *You will never be able to eliminate Bedbugs from a hotel

What is the best technique for treating under a toilet? *bait or aerosol

If chemical is left in your B&G (Compressed air chemical applicator) what could happen?

*may rust, clog or need replacing

What is the formula to know how much chemical an individual can handle? *body size & weight

In what location in the interior of a residence would flea larva most likely be found? *in the carpet

Which of the following weather conditions is highly conducive to flea development? *warm & humid

Which of the following residual insecticide application methods provides the quickest knock down for the control of fleas in the lawn area?

*power spray

Preparing a house for chemical treatment for which of the following pests, involves, removing objects from the floor beforehand?

*Cat Fleas

Which of the following application procedures is highly effective for treating an interior carpet for fleas?

*Low pressure fan spray

Why would it be useful to treat the family dog at the same time the residence is being treated for fleas?

*reduces possibility of re-infestation

How does an Insect Growth Regulator treatment affect fleas?

*Prevents fleas from reproducing

It is necessary to find out from the homeowner, where the pets bedding is during a flea inspection in a residence?

*true

In which stage of a fleas life cycle are pesticides ineffective and hardest to control? *pupa

Why should you have the homeowner vacuum after treatment for fleas?

*To motivate the process of pupa turning to adult

Should a centipede be found in a home, which of the following areas should be inspected by a field representative?

*damp areas outdoors

A centipede uses its _____ to inject poison. *claw

A centipede can be described as having...

*an elongated flattened body with one pair of legs per body segment

Which of the following long term methods is recommended for controlling House Flies in a food processing facility?

*Sanitation

The owner of a commercial storage facility complains of a sudden infestation of green bottle flies. Which of the following questions should the owner be asked in the initial interview?

*have dead rodents been discovered at the site

Which of the following actions should be taken first to control fruit or vinegar flies? *Locate all breeding sources (plumbing drains)

Although the exterior of an apartment complex has been treated for flies, the tenants still complain of seeing many flies in the courtyard> which of the following actions should be taken?

*Identify the source, inform landlords of any conditions conducive to fly infestation

The homeowners report a small fly with red eyes hovering around a trash compactor. Which type of fly has this characteristic?
*Fruit Fly

Drain Flies can be described by which of the following characteristics? *tiny yellowish black flies found near damp moist areas

The _____ fly is known to primarily reproduce in or around feces. *House

Controlling the larva stage of cluster flies is made problematic due to the fact that they? *develop in Earthworms

Where are silverfish infestations most likely to be found? *sub areas, attics, basements, bathtubs, sinks and old books

Which of the following insects is highly damaging to paper products? *Silverfish

In which of the following locations should insecticide dust formulation be used? *in attic for Silverfish

Furniture beetles have infested a woolen suit in a customers closet. Which of the following recommendations should be made?

*all woolens suspected of being infested should be dry cleaned, closet emptied, treat crack/crevice with residual insecticide

Which stored product pest is found in bagged and boxed spices in kitchen cabinets? *Cigarette beetle

Control of invader beetles begin in which of the following locations? *exterior

Carpet beetle larvae prefer to feed in/on?
*a secure site on animal fabrics

An example of an external feeder pest is? Larder beetle

Which of the following procedures is a great preventative tool against Carpet beetles? *sanitation

Whish of the following pests has the ability to digest keratin? *Clothes moth & Carpet beetle

When treating furniture for carpet beetles an inspector should use which of the following treatments?

*a light fine wet spray directly to material

What type of treatment for Carpet Beetles should be used? *low pressure fan spray

An adult tick has a total of _____ legs.

How should you treat for field crickets? *bait around exterior

Which of the following cricket exclusion methods should a homeowner use? *weather stripping all windows and entryways

What process underlies the use of pheromones as a monitoring tool? *they only attract members of a specific species

Which of the following practices will likely result in insecticide resistant populations? *repetitive use of same chemical

Which of the following procedures should be recommended to homeowners to prevent an infestation of stored product in pantries and kitchens?

*use tight fitting containers, store dried foods in freezers, keep storage area clean

Which of the following actions is recommended to eliminate Springtails in a residence, *find excessive moisture areas in house and dry them out

Which of the following occasional invaders is found in basements, kitchens and bathrooms?

*Springtails

Theoretically what is the first step in the pest inspection process? *conduct detailed interview with customer

Which of the following stored product pests is an internal feeder?
*Rice Weevil

Which of the following stored product pests feed inside a kernal of corn? Granary Weevil

Scorpions are capable of surviving a total of _ *1	year without food & water.
Invertebrates have no *backbone	

The most problematic invertebrate pest in North America is the imported fire ant.

*True

Which of the following pest is ½ inch long, has numerous dark patches, a moulded gray appearance and are found in bakeries?

*Firebrat

What tool should be used when treating ants coming out of a light fixture? *Duster

Which of the following major factors influence the frequency of follow-up visits for structures having an ant infestation?

*Non acceptance of bait, competing food source, feedback from customer

Why should the bases and trunks of trees in a backyard be checked during a search for ants?

Argentine ants feed on aphid secretions

What type of ant would you use a perimeter barrier treatment for? *Argentine ant

What color is an argentine ant? *brown

In which of the following locations would Pharoah most likely be found? *kitchens & bathrooms

Which type of ant typically responds to pesticide spraying by budding into satellite colonies?

*Pharaoh

Which of the following conditions would be conducive to Carpenter ant nests near a residence?

*dead tree trunk/stump

Following treatment, what measure should be recommended to prevent carpenter ants from reaching a structure?

*trim overhanging tree limbs that are in contact with the structure

Which of the following pesticide formulations should be used to treat for carpenter ants in a wall void?

*dust

What are the conditions to likely invite a a Carpenter ant infestation? *open window

At what point are long term control measures for ants considered complete? *once a habitat has been destroyed

For which of the following ants should exterior ground and residual insecticide barrier treatments be recommended?

*Thief ants

How do you identify an Imported Red Fire Ant colony? *Mound in soil

If wind conditions are causing pesticide drift, which of the following methods could be used to treat Imported Fire ants around the outside foundations of a residence?

*Treat mounds using Rod Method

What step is essential when performing effective ant control? *interview customer

Carpenter ant colonies can be found in? *moist wood

Which of the following ants take advantage of inadequate attic ventilation? *Carpenter ants

Which of the following type of ants require transportation into the home? *Pharaoh

What ant leaves pieces of sawdust like wood shavings that contain body parts of dead insects?

*Carpenter ant

What ant rarely invades the home? *Harvester

Argentine ant nests are typically found in? *Moist soil next to food & water

An ant with 2 nodes includes the? *Harvester

Which of the following types of ant is yellowish-brownish-redish, about $\frac{1}{8}$ inch in length and has a circle of hair at the tip of its abdomen?

*Crazy long legged

*true

Which of the following type of ants has 2 nodes in their pedicel and the pedicel attaches

to the upper part of the abdomen? *Acrobat ant
Which of the following types of ants has an evenly rounded thorax? *Carpenter ant
The ant is described as having two nodes and is yellowish-gold with a reddish brown abdomen. *Pharaoh
Which of the following types of ants defends its colony by giving off a repulsive odor and bites fiercely? *Acrobat ant
The argentine ant has stages of development or life cycles. *4
ants are often mistaken for Pharaoh ants. *Thief
Carpenter ants primarily swarm in the *Spring
The majority of ants can be considered *Omnivore
How many nodes does a carpenter ant have? *1
Baits should only be used for which of the following species of ant? *Pharaoh
During which if the following times of day should a yellow jacket infestation be treated? *Dusk to Dawn (nighttime)
To treat for Carpenter Bee infestation you should inject dust inside the wood hole and and plug the hole.

A homeowner has complained of large black flying insects hovering around the outside of their home. Holes have been discovered that appear to have penetrated several inches deep into the ceiling support beams. Which insect could have caused this? *Carpenter bee.

_____ are known to bore long tunnels into wood and divide tunnels into sections.

How many hours before sunrise are bees considered inactive? *2

A Paper Wasp nest has which of the following characteristics?
*resembles shape of an inverted umbrella found in caves/on structures

Bumble Bees are known to nest in which of the following areas? *Trees, tree stumps, wall voids

Which of the following treatment methods would be used to control Oriental Cockroaches infesting a residence?

*Teat damp areas around outside of house in the garage and under the house

Which of the following cockroach species are the most common and produces the most eggs the fastest?

*German

Which of the following areas should be treated with insecticides to control american Cockroaches?

*Along plumbing pipes entering the sub area and under door jams

Which of the following pests should be treated by applying pesticides with a residual treatment into all the cracks and crevices in an infested area?

*German cockroaches

What information can be gained from the use of glue boards /traps as part of an ongoing treatment/maintenance program for German cockroaches? *evidence of population reduction

Which of the following treatment methods should be recommended to control German Roaches?

*Sanitation, residual insecticides and insect growth regulators

Which of the following approaches should be used to treat for cockroaches inside of computers?

*Baits and traps

^{*}Carpenter bees

Brown banded cockroaches prefer to live in which of the following types of environmental settings?

*warm

A consumer reports having seen Oriental Cockroaches. Which of the following sites is most likely the source of the infestation?

*water meter enclosures

What are the environmental conditions for the Oriental Cockroach? *Damp

A strong indicator of an active cockroach infestation includes which of the following? *fecal matter

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What information can be gained from the use of give boards/traps as part of ongoing treatment maintenance program for German Cockroaches?

*Evidence of population or reduction

*American	Cockroaches are commonly found in sanitary (sewers and storm drains)
*German	Cockroaches are commonly found in restaurants

How should a German Cockroach infestation be inspected for?

*Use a flushing agent containing pyrethrins

How many egg capsules can a German Cockroach produce in a lifetime? *4-8
A German Cockroach is known to live up to *12 months
Which of the following instar stages applies to the Brown Banded Cockroach Nymph? *6-8
The cockroach is the largest in size of the cockroaches. *American
What is the proper name of the purse shaded egg capsule found on a female cockroach? *Ootheca
The female cockroach is known to carry the egg capsule protruding from the rear of the abdomen until the eggs are ready to hatch? *German
Which of the following types of cockroaches carry the egg capsule for about 30 hours and either drops or attaches it to a protected surface near a food supply? *Smokey Brown
How long can a cockroach live with water but without food? *One month
The visible signs of an active Bedbug infestation are indicated by? *Small blood stains on the sheets
Bedbugs are successful at hiding during daylight hours due to their *Flattened bodies
Bedbugs are most active during *Midnight to dawn
Which of the following harborace sites should be inspected for Bedbugs? *Peeling wallpaper, bed frames, cracks & crevices
There are segments found on the antennas of a bedbug? *4
A Bedbug can survive without feeding? *3-4 month
During daylight hours bedbugs can be found in .

*Upholstery of chairs
What should you tell a customer after treating for Bedbugs? *Set traps
Normal female Bedbugs can lay per day. *1-5 eggs
Bedbugs release a odor when disturbed. *Sweet
Weblike debris is found in packages during an inspection for stored products pests. What pest caused this? *Indian Meal Moth
Casemaking/ Clothes Moths consume *Hair, keratin, leather, wool
The stages of a Clothes Moth causes the most damage to the clothing. *Larvae
What is the average lifespan of an adult Clothes Moth (Casemaking or Webbing Moth)? *10-30 days
Which of the following roof rat behavioral traits makes in necessary to pre-bait traps at the beginning of a control program? *Aversion to new objects
Which of the following methods describes trimming back foliage and sealing holes as a non-chemical control method? *execution
In which of the following areas of a structure would Norway Rats most likely be found? *Sub-area
Which of the following actions should be taken first in response to consumer complaints of rats in the attic? *Inspect the attic and adjacent areas of rest activity

Which of the following application procedures should be used to control an infestation of mice in a family residence?

*Place at ground level in an anchored and locked Tamder restraint bail station

After a rodent control program has been established which of the following acts should be taken to maintain treatment effectiveness.

*Eliminate harborage

How many days between should you wait to check rodent bail used in bait stations? *Checking at least weekly and relocate after 3 weeks if there are no signs of acceptance What size opening will allow adult mice to enter a structure? *1/4 ince A rat infestation can be identified by which of the following signs? *Urine stains Which of the following rodents is most likely to infest homes or businesses? *Roof Rat Stains on the side of a pipe and other structure would be signs of what pest? *Roof Rat When rodent proofing a structure for rats what is the minimum size opening that should be sealed? *1/2 inch Which of the following rodent devices can act as a trap and monitoring tool for insect IPM (Integrated Pest Management) Programs? *Glue board The _____ has a capsule shaped fecal matter \(^3\)4 to 1 inch in length. *Norway Rat Which of the following sizes of fecal dropping indicates a Roof Rat infestation? *½ inch The _____ is known to have the largest fecal size. *Norway Rat A Roof Rat can be identified by which particular characteristic? *Tail is longer than the body. A major structural pest in California is the _____. *Roof Rat Which of the following would be considered a primary treatment method for rodent infestation?

Which of the following pesticide categories include boric acid? *Inorganics

*Traps and baits

What should be added to a tank mix of residual pesticide for a long term control plan? *IGR (Insect Growth Regulator)

For which of the following applications would an Ultra Low Volume (ULV) generator be recommended?

*Space treatment in a warehouse

Which of the following materials should be used to treat roaches found in an electrical outlet?

*Bait

Which of the following characteristics describes the greatest advantage of using wettable powder as a pesticide treatment?

*The product has long residual effect

A customer is on a quarterly exterior maintenance program. Which of the following pesticide formulations should be used for an effective barrier treatment?

*Wettable Powder

Which of the following groups of signal words show the ranking from most toxic to least toxic?

*Banger, warning, caution

Why would it be useful to conduct a visual inspection before performing a pesticide application?

*To identify objects that could be damaged or contaminated by pesticides

What insecticide formulation is low risk to occupants of a nursing home, operating room, or intensive care unit?

*Bait and/or traps because there is no order

Which of the following attributes describe granular formulation of insecticide? *Ready to use

Why must pesticide identification tags be placed on all pesticides service containers? *To comply with California code of regulations

What information must be on all service container pesticide labels?

*EDA registration number, chemical name, and name and address of the person or firm responsible for the container

Which of the following actions should be taken if the wind is causing a drift of pesticides to a non-target area?

*Stop application and return another day

What requirement must be met in all spray equipment before pesticides are mixed?

*The service container label is accurate

Which of the following effects can be created by excessive pressure in a sprayer? *Uneven pesticide coverage

At what point are health effect or symptoms of acute pesticide exposure evident? *Immediate or within 24 hours of exposure

What initial action should be taken in case of accidental poisoning or an applicator? *Start first aid, consult pesticide label, seek medical attention immediately